

ANNUAL REPORT AND STATEMENT OF ACCOUNTS

FOR THE YEAR ENDED
31st December 1947

*Presented to Parliament in pursuance of Sections 31 (4) and 54 (1)
of the Coal Industry Nationalisation Act, 1946*

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NATIONAL COAL BOARD

Hobart House,
Grosvenor Place,
London, S W.1.

30 June, 1948

SIR,

I have the honour to send you herewith the second Annual Report and Statement of Accounts of the National Coal Board. They cover the year ended 31st December, 1947—the first year of the coal industry under public ownership.

The Report is submitted in accordance with the provisions of Section 54 of the Coal Industry Nationalisation Act, 1946, and the Accounts are submitted in accordance with the provisions of Section 31 of that Act. A copy of the auditor's report is also enclosed.

I have the honour to be, Sir,

Your obedient Servant,

H. L. J. N. C. L. G.

Chairman

The Right Hon. Hugh T. N. Gaitskell, C B E , M P ,
Minister of Fuel and Power.

ANNUAL REPORT FOR THE YEAR 1947

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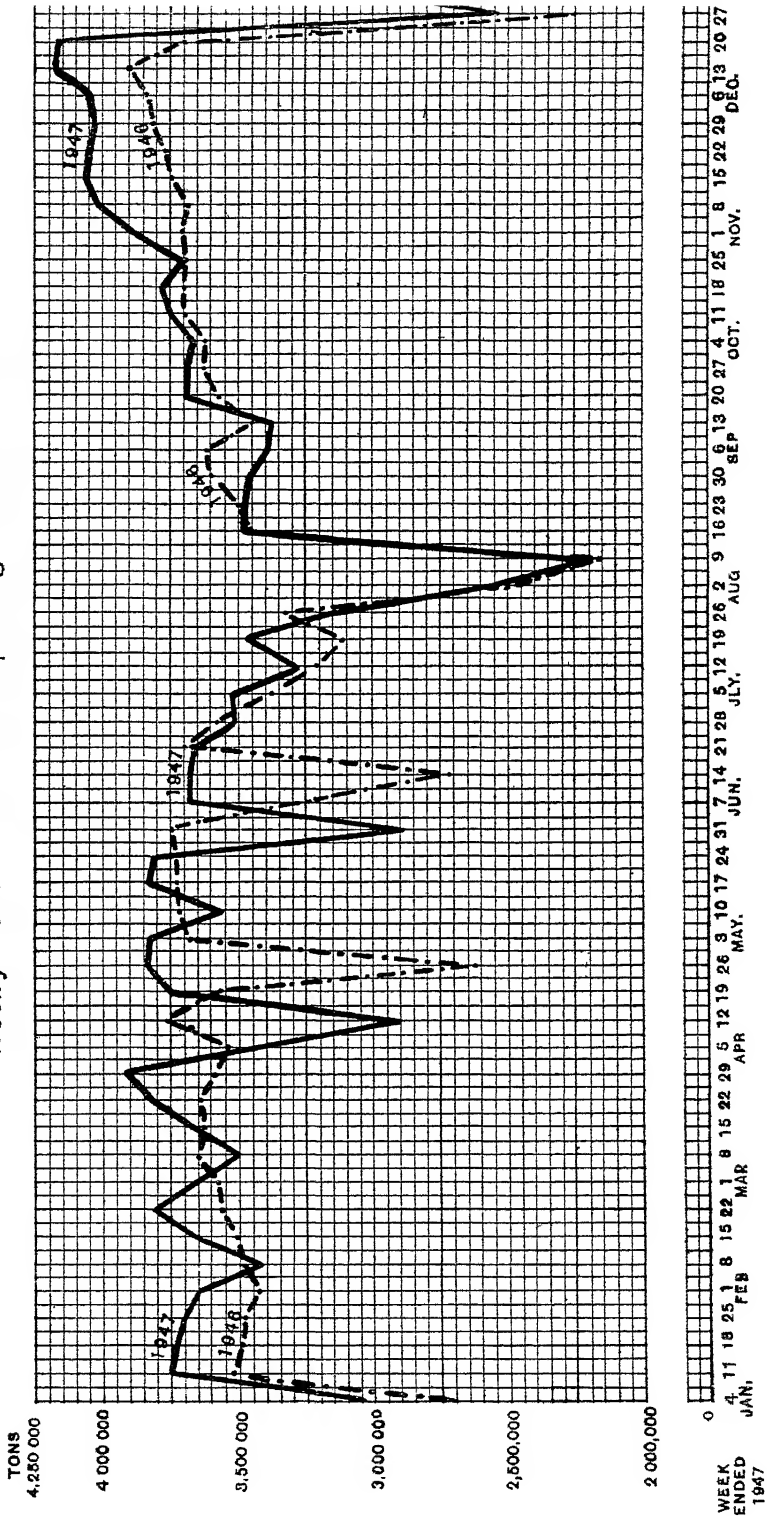
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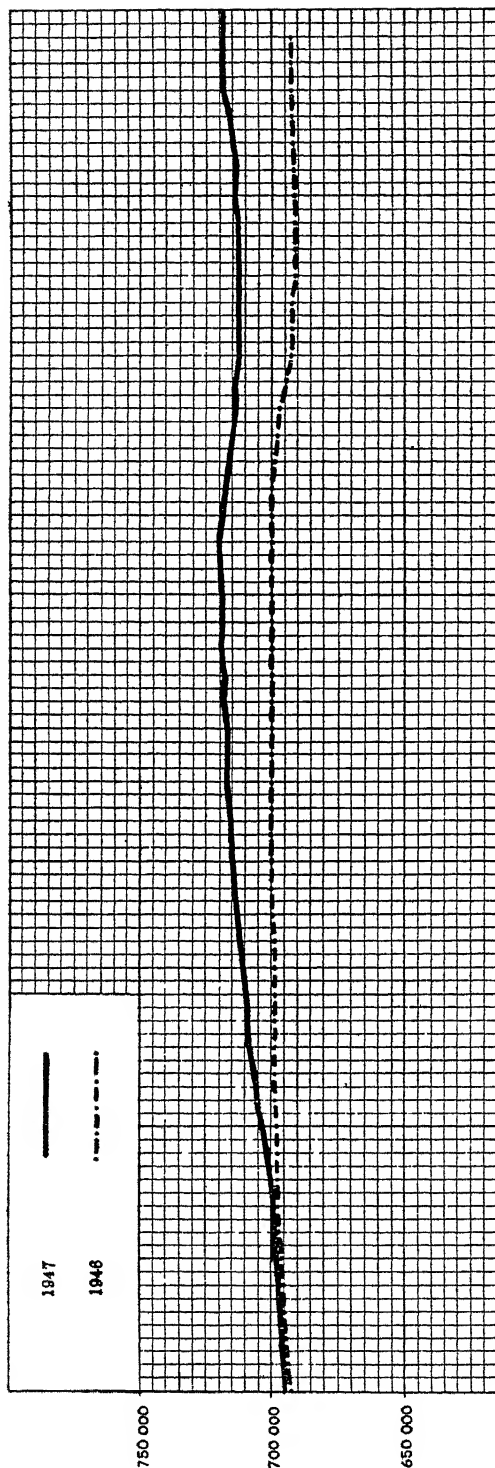
Great Britain

Saleable Output of Deep Mined Coal

Weekly 1947 and for Corresponding Weeks in 1946



**Total Number of Wage Earners on Colliery Books
Weekly 1947 and for Corresponding Weeks in 1946**



WEEK
ENDED
7947

[illegible]

ANNUAL REPORT FOR 1947

CHAPTER I

THE EARLY MONTHS

Introduction

1 This is the second Annual Report of the National Coal Board, but it is their first Report of the coal industry under public ownership. The first Annual Report described how, in the closing months of 1946, the Board prepared to take over the industry. This Report begins at the vesting date, 1st January, 1947, when the coal mines changed hands and the Board took charge

2. On 1st January, the members of the Board were :

Lord Hyndley, Chairman.

Sir Arthur Street, Deputy Chairman

Lord Citrine, Manpower and Welfare Member.

Mr. Ebby Edwards, Labour Relations Member.

Sir Charles Ellis, Scientific Member.

Mr. J. C. Gridley, Marketing Member.

Mr. L. H. H. Lowe, Finance Member

Sir Charles Reid, Production Member.

Mr. T. E. B. Young, Production Member.

In May, Lord Citrine resigned from the Board on his appointment as Chairman of the British Electricity Authority. His place was taken by Sir Joseph Hallsworth, who joined the Board in July

3. In 1946, the Board had settled the outline of their organisation. The coalfields were grouped into eight Divisions under the control of Divisional Boards. (*See Appendices I and II.*) The Divisional Boards were all appointed by the end of 1946 and were ready to assume responsibility on the vesting date. The National Coal Board delegated managerial responsibility to the Divisional Boards from the start. Under the Divisional Boards, the collieries were grouped into Areas. Before nationalisation there were too many small units in the industry. The new Areas were about the same size as the few larger undertakings in the industry under private ownership. They were to be the main units of the Board's management. In most parts of the country the newly-appointed Divisional Boards had not had time to organise the Area managements fully before the vesting date. They had to make use of a transitional organisation based on the headquarters of the colliery companies. This will be described later.

4. On the vesting date the Board sent a message to each person employed in the industry, explaining their aim—to create conditions in which the industry was to become more productive and efficient to the benefit of the nation and the workers in the industry

5. Arrangements were made jointly by the Board, the National Association of Colliery Managers, the National Union of Mineworkers and the National Federation of Colliery Deputies' Associations for ceremonies to be held throughout the coalfields on or immediately after the vesting date. These ceremonies were an occasion for stressing the duties and obligations of the newly-nationalised industry.

6 The Board assumed responsibility at a difficult time. Output had begun to fall in 1940, and had continued to fall until the Autumn of 1946, when the downward trend was halted and reversed. This improvement came too late. On 1st January, 1947, the country's stocks of coal were 8.5 million tons, 4 million tons less than they were at the same time in the previous winter, and 6 million tons less than they were at the end of 1939. The shortage of coal had already forced short-time working upon a number of factories. The outlook for the rest of the winter was bad. The following table shows the decline in production and stocks during the war

Year	Coal Production			Distributed Stocks at 31st December
	Deep-mined	Opencast	Total	
	Million Tons			
1938	227.0	—	227.0	Not known
1939	231.3	—	231.3	14.6
1940	224.3	—	224.3	17.6
1941	206.3	—	206.3	18.9
1942	203.6	1.3	204.9	18.6
1943	194.5	4.4	198.9	17.6
1944	184.1	8.6	192.7	16.0
1945	174.7	8.1	182.8	12.4
1946	181.2	8.8	190.0	8.5

7. At the beginning of 1947 the number of men on colliery books was 692,000. This was almost the lowest figure on record.

The Fuel Crisis

8 In the early months most of the time and energies of the National Coal Board and the Divisional Boards had to be spent in maintaining output and keeping the coal flowing to consumers in the exceptionally bad weather. During January the consumption of coal exceeded production by more than 300,000 tons a week, and distributed stocks—already down to the danger-point—fell rapidly. The severe weather started on 23rd January, and at the beginning of February it was freezing hard. The railways—particularly the L.M.S. and the L.N.E.R. with their heavy traffic from the Midlands to the South—were finding difficulty in moving all the coal which the mines produced, and loaded wagons were accumulating in colliery sidings. From the middle of January emergency measures for keeping essential rail services working were in operation. By a decision of the Government, gas works, power stations, water works and ships' bunkers were to receive their allocations of coal in full, with priority over all other consumers. House coal depots and railways were, if possible, to receive their allocations in full, iron and steel works and coking plants were to receive three-quarters, and general industry half of their allocations. Certain important industrial undertakings were to receive additional allocations out of a specially created pool of 100,000 tons per week.

9 On 7th February the Government prohibited the export of coal and placed close restrictions on supplies to ships' bunkers. On 10th February, all but the essential industries in London and the South Eastern, Midland and North Western regions of the country were asked to stop using electric power. About 2,000,000 workers were unemployed. Domestic consumers were instructed to use no power during certain hours. The railways gave absolute priority to coal class traffic.

direct the operations to counter the crisis. Representatives of the National Coal Board, the Central Electricity Board and the Railway Executive Committee were appointed to assist this Ministerial Committee. Further restrictions on the consumption of electricity and on railway travel were introduced at once; the Government decided to use troops and army lorries wherever their assistance was needed, and the Ministry of Fuel and Power were given power to requisition and divert supplies of coal. The Headquarters of the National Coal Board were already co-operating with the Ministry of Fuel and Power and with the senior executives of the railway companies in the day-to-day work of keeping supplies flowing.

11. The most urgent tasks were to keep the power stations going, and to build up their stocks, to free the railway movement of coal in order to provide empty wagons to take coal away from the pits, and to get the miners from their homes to their work.

12. The power stations which were most affected by the crisis were the large ones in London and the South, supplied mainly by sea. Under the guidance of representatives of the Board, the distributors engaged in the coastwise coal trade pooled their plant and their coal. As a result of this co-operation, and the cuts in electricity, the stocks at these stations began to increase. In consultation with representatives of the Central Electricity Board, the marketing organisation of the National Coal Board prepared a programme of deliveries to all power stations, designed to build up stocks from just over one week's consumption to two weeks' by 10th March at the latest, and after that date to keep the stations supplied with enough coal to provide for three-quarters of their normal consumption. Under the instructions of the Government, the coal was to be found, if necessary, at the expense of industry.

13. It was soon realised that the normal flow of coal traffic through railway marshalling yards could no longer be maintained, many yards were immobilised through heavy falls of snow. In order to get the traffic moving again and to keep the pits winding, colliery staffs had to re-label wagons, whether they were still at the pits or in the hands of the railway companies, to enable full train loads to be despatched over routes which could accept them, thus avoiding the marshalling yards. Between 14th and 17th February, 120 trains were re-labelled at East Midlands Collieries alone.

14. In every coalfield, the fuel crisis was a story of improvisation and of great efforts both by individuals and by groups. In many places, railways were snowed up and roads were blocked. Troops, prisoners of war and civil prisoners were used on the clearance of railway lines and roads. Bulldozers were brought from the opencast coal sites. A number of tractors used at collieries and at the Board's farms were fitted with improvised ploughs to clear the lanes leading from the main roads to the collieries. In the East Midlands Division—the most vulnerable to transport difficulties—820 army lorries were used in transporting coal by road. At one time there were 12,800 railway wagons loaded with coal in the Division which could not be moved. By the beginning of March there were only 1,400. Canals in many parts of the country were frozen for five weeks, and the coal normally carried by canal was diverted to rail and road.

15. Throughout, the Board's first aim was to get coal delivered to "essential" consumers. Failing that, the coal had somehow to be got away from the collieries to any consumer who could take it so that the wagons could be returned empty and the collieries kept in production. As a result, firms in some parts of the country—notably in Scotland and in the Northern Division—were better supplied than firms in other parts of the country.

many miles through the snow to get to their work. In South Wales a spontaneous offer was made by the mine-workers to work on Sundays in order to lessen the effect of the fuel crisis. They worked on seven Sundays—producing an extra 42,700 tons. In parts of Scotland the Board's staff had difficulty in getting through to isolated colliery offices to prepare wages records and to get cash from banks for paying wages, and cash was carried to some paying points on horseback.

17. By the beginning of March, despite the continued bad weather, the situation had improved. Although the country's coal stocks as a whole continued to fall until they were little more than 5 million tons on 22nd March, the immediate crisis which had threatened to close down power stations and gas works had passed. Stocks at power stations, which fell to little more than a week's supply started to rise again during the second week in February, and the stocks at gas works (down to $1\frac{1}{2}$ weeks' supply) began to improve a week later. In view of this improvement, factories in the Midlands were allowed to switch on power on 24th February, and factories in other parts of the country on 3rd March. On 8th March the Board of Trade announced that industry was to return to the allocation arrangements which had been originally introduced on 20th January, but which had broken down during the worst days of the crisis. Firms would, however, only receive $33\frac{1}{3}$ per cent. of their allocations, instead of 50 per cent. as before, though there would now be a larger "pool" from which supplementary allocations could be made. By the end of March power stations had three weeks' stock in hand, and gasworks more than a fortnight's stock.

18. Thanks to the efforts made to keep the coal moving and the pits winding, the loss in coal production, though serious, was not disastrous. The total output of coal in February and March was actually 1,100,000 tons more than it was in the corresponding months of 1946

Early Measures to Increase Output

19. On the vesting date it was clear to the Board that large-scale reconstruction and development of the industry, although the only safeguard for its efficiency in the long run, could not begin to be effective for some time. The need was to increase coal output in a matter of months. A beginning could be made, although the new Area managements had not been formed or completed in many parts of the coalfields. Before the end of January, colliery managers were instructed by Divisional Boards to endeavour to increase production by a number of measures. On the vesting date, the mineworkers were in good heart. It was for the colliery managers, with the assistance of the Union lodges, to enlist the men's co-operation by getting them to improve attendance and, wherever reasonable, to accept increased tasks. Another way of getting more coal was to close down the less productive sections of pits and transfer the men thus set free to more productive sections. Often the layout and the method of working could be changed so as to increase production. More machinery was to be used, particularly conveyor belts and other mechanical haulage devices, so as to reduce the number of "oncost" workers employed on the haulage and make more men available for productive employment at the coal face. Modern machinery was to be introduced at the face wherever early results were reasonably assured. Finally, colliery managers had to be prepared to absorb recruited labour quickly. The Area managements were to lend the colliery managers all possible assistance as soon as they were in a position to do so. The effect of these instructions was to focus the attention

20 During the fuel crisis the Economic Survey for 1947 was published. It set for coal production a "target" of 200,000,000 tons. Assuming an output of 10,000,000 tons from opencast workings, this meant an increase in deep-mined output of about 5 per cent. compared with output in 1946. The manpower "target" was 730,000 by the end of the year. As the number employed on 1st January was 692,000, and as wastage was estimated at 60,000, a recruitment of nearly 100,000 men and boys would be needed. Before the end of February the Government and the Board discussed the best way of achieving these targets.

21. The Board informed the Government of their plans for increasing coal output immediately, and asked for their help in several ways. They recommended that the call-up of mineworkers should be deferred so long as they stayed in the industry; the Government training centres should be expanded to allow for double shift training, the Training Regulations should be relaxed to enable the preliminary training of adults above ground to be completed in three weeks instead of five and to enable more recruits to be trained below ground on coal faces, priority should be given to the coal industry for mining machinery and other supplies; 48,000 new houses should be built in the coalfields, 27,000 of them as quickly as possible near pits where new labour could be readily absorbed.

22 In response, the Government agreed that mineworkers should not be called up for military service. They agreed to expand the capacity of the Government training centres as quickly as possible. The Training Regulations were relaxed as the Board asked. The requirements of the coal industry for materials and equipment were given priority and a special organisation was set up at the Ministry of Supply to see that the coal industry's requirements were met. Local authorities were asked, wherever possible, to give priority to the housing needs of miners. The mining areas were to receive an extra share of aluminium houses.

Administrative Problems

ORGANISING THE TAKE-OVER

23. The Minister of Fuel and Power, in announcing on 18th November, 1946, that the coal mines would be transferred to the Board on 1st January, had said that in many ways the Board would have to make temporary and provisional arrangements for the management of the industry until they had built up their organisation.

24 On the vesting date the newly appointed Divisional Boards assumed general direction of the coalfields but in most parts of the country the Areas, which were to be the Board's main units of management, were not yet sufficiently developed to take full responsibility. Accordingly arrangements had been made before the vesting date for the headquarters of most colliery companies to carry on temporarily as before. They were known as "Coal Board Units." "Controllers" had been appointed by Divisional Boards to take charge of the assets, staff and business of each Coal Board Unit and were responsible to the Divisional Board or, where possible, to the Area General Manager. The Controllers also administered those optionable assets within their Unit which had not yet vested in the Board but were likely to do so

25. Special arrangements were needed for the temporary management of the coal industry assets previously owned by the composite concerns operating say iron and steel works as well as collieries. Apart from the difficulty of sorting out which assets would transfer to the Board and which would remain with the company—this is dealt with in paragraph 43 below—the administration of the collieries could not immediately be unravelled from the administration of the undertaking as a whole. Therefore, agreements had been made with some of the composite concerns under which they would manage for a few months the assets vesting in the Board on 1st January. In other cases a Controller was appointed to manage the assets which vested in the Board and the company agreed to provide him with necessary services, such as accounting, supplies, etc.

26. Some Divisions had been able to dispense altogether with transitional arrangements of this kind. They had been able to speed the setting up of their permanent Area organisations sufficiently for them to take full charge of the collieries from the start.

27. In one way or another continuity in the routine management of coal production was assured. Nor was there any interruption in the supply of coal to customers. Collieries continued to despatch their coal through the existing channels of distribution and on the terms of current contracts. They took their instructions from the Marketing Directors of the Divisional Boards, acting in their capacity of Coal Supplies Officers of the Ministry of Fuel and Power. Wages stability throughout the industry had also been secured by an agreement reached between the Board and the National Union of Mineworkers before the vesting date, substituting the Board for the former owners as a party to all the collective agreements which had existed between the owners and the Union.

BUILDING THE NEW ORGANISATION

28. The Divisional Boards had to build up the permanent organisation in the coalfields as soon as possible. They needed to set up small staffs of specialists at their headquarters. They also had to set up the Area organisations. These tasks, begun before the vesting date, had now to be accelerated, despite their pre-occupation with taking over the assets of the industry, ensuring continuity in the industry's operations, meeting the fuel crisis and devising measures to prevent its recurrence next year.

29. The process of selecting staff for the key appointments at Divisions and Areas was not easy. Immediate production might be endangered by the removal to a Division or Area post of a man who was required at the colliery where he was employed. There was also a shortage of technically qualified men and in particular of mining engineers who had specialised in the planning of new collieries. Only a few of the larger undertakings in the industry had planning staffs of the calibre which the Board required. Some Divisions were particularly short of experienced planning staff. In the whole of Scotland, for instance, there was only one large planning staff. There was also a shortage of mechanical and electrical engineers with coalmining experience, who were badly needed to fill key posts.

30. Office accommodation was another difficulty. The offices vesting in the Board had been built to accommodate some 800 relatively small units. Accommodation was now needed for 56 large units, that is, 48 Areas and 8 Divisional Boards. None of the colliery head offices proved adequate to house Divisional Boards and their staffs. At the vesting date no Divisional Board had been able to find permanent quarters which could house the Board and their staff under one roof. Most members of Divisional Boards were scattered in different buildings at considerable distances apart, and sometimes in

different towns. The Chairman, Deputy Chairman and Marketing Director of the North-Eastern Divisional Board were each in separate offices in and about Sheffield while the Labour and Production Directors and the nucleus of their staffs were sharing an office at Doncaster with a newly created Area Staff. The members of the South-Western Divisional Board were housed in three separate buildings in Cardiff, except for the Production Director who was stationed 15 miles outside the town, in an office which was intended to be the headquarters of an Area. The situation in the other Divisions was much the same.

31. Difficulties were also experienced in getting accommodation for the Area Headquarters. In hardly any case was it possible for the Area General Manager to begin operations with all his key staff under the same roof. Whole blocks of Area staff had to begin work in scattered offices often widely separated one from the other.

32. There was little prospect of the Boards' being able to buy or lease suitable office buildings. To have built new offices would have taken too long and meant the withdrawal of labour and material from housing construction. In some instances, the Divisional Boards bought large houses standing empty as a quick solution of their problem. An alternative was the extension of existing colliery offices, generally by means of pre-fabricated buildings. This alternative was adopted wherever possible. The following table shows the number and cost of properties bought to provide offices for Divisional and Area Staffs:

PROPERTIES BOUGHT UP TO 31ST DECEMBER, 1947

Division	Number of Properties Purchased	Cost of Properties Purchased
Scottish	6	45,533
Northern	5	28,932
North Eastern	8	81,004
North Western	—	—
East Midlands	7	84,555
West Midlands	5	102,228
South Western	2	12,237
South Eastern	—	—
	33	354,489

33 Shortages of staff and offices were not the only difficulties. The re-grouping of the collieries in the interests of efficiency and planning, inevitably cut across the pattern of previous management. In the South Western Division, for example, two colliery companies had owned pits now to be distributed over four of the Areas in that Division, one had operated pits now to be divided among three Areas and one company had operated within two of the Areas. The companies' staffs had to be split up and re-grouped and the records dissected and re-assembled.

34. One by one the Coal Board Units disappeared. The staffs of the headquarters of the old companies were gradually fused in the Board's Areas, and before the end of the summer the Board's new organisation in most parts of the country was, in its essentials, complete. A chart showing the Board's organisation in outline at the national headquarters and in the Divisions and Areas is at Appendix III.

35. The National Coal Board are responsible through the Minister and Parliament to the public for everything that happens in the industry. The Divisional Boards and the Area Managements are not legal entities. They must operate in the name of the National Coal Board. In practice, the National Coal Board settle the national policy, conduct national negotiations, obtain capital from the Minister, and provide common services for the industry, such as scientific research. Within the limits of national policy, the Divisional Boards exercise wide discretion in forming policy in their coalfields and applying national policy. The Divisional Boards are the chief executive agents of the National Coal Board, and it is through them that the national Board keep in touch with the coalfields. The Divisional Boards, in turn, while responsible for co-ordinating development in their coalfields, for framing their policy, and for providing expert guidance and the stimulus to efficiency and economy, must delegate managerial responsibility to the Areas, where the main business of the Board is conducted. Because the Areas are each large business concerns with an average turnover of about £10,000,000 a year, the work has to be divided into specialist departments—production, marketing, labour relations, welfare and training, science, administration and finance. The chief production official at the Area was made the Area General Manager. He was put in sole charge of the collieries and given direct responsibility for coal getting and the future planning of collieries. He had a general responsibility for the efficiency of the Area. Later in the year the functions of the Area General Manager were changed (see Chapter IX). At the collieries themselves, the colliery managers with their responsibility under law for the safety of the men and the mine, remained in charge. They now look to the Area for guidance and instructions, instead of, as in the past, to the Board of Directors of their company.

36. The chart at Appendix III shows how the work at the National and Divisional headquarters is divided into departments as it is at the Areas. Departments at Divisions have dealings with corresponding departments at national and Area headquarters on technical subjects—and this must be so unless the National Coal Board, the Divisional Boards and the Area General Managers, are not to be distracted by too much technical detail from their main tasks. The lines of responsibility and command, however, run from the National Coal Board to the Divisional Boards, from them to the Areas, and from the Areas to the collieries. The principle is to delegate but not to diffuse responsibility, but the application of the principle in an organisation so suddenly created and so large and complex as the nationalised coal industry presents difficulties. There are difficulties inherent in any amalgamation of business concerns, but the nationalisation of the coal industry brought special difficulties because of the formidable change of scale. Even those who had previously worked in the largest private companies in the coal industry find it necessary to adapt themselves to new methods and modes of thought. The Board's aim is to evolve an organisation as flexible and efficient as the work demands. They will continue to devote close attention to shaping the structure of the organisation and still more to developing the habits and skills which alone can make it work successfully.

SECURING THE ASSETS

37. On the vesting date, neither the National Coal Board nor the Divisional Boards knew exactly what assets had been transferred to the Board under the Coal Industry Nationalisation Act, or which assets remained to be transferred.

38. Regulations had been made by the Minister requiring the owners to send in "Statements of Interests" listing their assets by 31st January, but this time limit had to be extended. Many colliery companies found difficulty in preparing

these statements; some were submitted in the wrong form and had to be re-done. For the larger companies owning several collieries and a variety of ancillary properties, the task of compiling the particulars and plans was massive. Out of roughly a thousand "Statements of Interests" only a handful were sent in before 1st January and only 450 had been received at the beginning of March. Most of the rest were sent in by the end of June but at the end of the year there were still about 100 outstanding.

39. The coal mines themselves, colliery coke ovens, stocks of coal and other products and a mass of associated plant and equipment were transferred by the Act automatically on the vesting date; but though the Divisional Boards knew the type of assets which had been transferred automatically at each colliery they could not in the absence of the "Statements of Interests" always be certain how many things of each kind there were. Again there was a group of coal industry assets which only passed to the Board on the exercise of an option by the Board or by the owners; in some instances it was sufficient for either party to exercise an option and then the assets were transferred; in other instances when one party exercised an option the other could object and then the issue had to be settled by arbitration.

40 Time limits were fixed by Regulation for exercising options and for objecting to them and these did not expire until some months after the "Statements of Interests" had been received. Thus the processes of option, objection and arbitration were not completed during the year.

41. The Board had made arrangements during 1946 to narrow the field of uncertainty. They enlisted the co-operation of the colliery companies and asked them in advance of the "Statements of Interests" to give particulars of their assets and to say which assets in the optionable classes they wished to retain and which they wished to give up. Armed with this information the Board had been able to issue many options before the vesting date. A number were expressed in general terms covering for instance all consumable stores, all waterworks and all housing property occupied by colliery employees.

42. One of the early tasks of the Divisional Boards was to establish which were the assets coming within the general definitions of the Act and within the terms of general options exercised by the Board before the vesting date. They also had to see that further options, where necessary, were exercised as soon as possible though often this was not possible in advance of the "Statements of Interests". It was not the Board's policy to acquire assets merely for the sake of acquiring them. They only took those assets which were needed for their business, but as most of the property of colliery companies had been owned by them to facilitate their business and would no longer be required by them, the Board for their part wished to acquire and the owners wished to give up most of the optionable assets.

43. Composite concerns, e.g. those operating both collieries and iron and steel works, presented special problems both for the companies and the Board. The severance of coal-getting from other activities was in the nature of a surgical operation. It was generally necessary by agreement between the two parties to divide up land, offices and housing property and to apportion common services such as power, transport, engineering maintenance etc. It was also necessary to settle by negotiation which staff were to come to the Board and which to remain with the company, and to dispose of contracts which covered both sides of the companies' activities.

44. By the end of the year the listing of all the Board's assets could not be complete—it was a process like the making of the "Domesday Book"—but the Board had a reasonably good idea of the size and scope of their inheritance.

45. The principal items are

(a) *Collieries*

There are over 1,400 which, with their stocks of products and stores, their plant and equipment—waterworks, power stations etc—have vested in the Board. Of these, about 400 are “small mines” owned by the Board but operated by private concerns under licence from the Board.

(b) *Manufactured fuel and briquetting plants*

The Board own 30 plants, of which 10 were not transferred under the Nationalisation Act but were bought from the Ministry of Fuel and Power

(c) *Carbonisation, By-Product, and other Plants*

These include 55 coke ovens which produce over two-fifths of the country's “hard coke” (i.e. other than gas coke), tar distillation plants, benzol recovery, sulphuric acid and pyrites recovery plants.

(d) *Brick works and Pipe works*

The Board own 85 such works.

(e) *Land*

Apart from the land on which the colliery buildings, sidings etc stand, the Board own over 225,000 acres of farm land, freehold and leasehold; also sports grounds, undeveloped housing land etc.

(f) *Houses*

141,000 houses have passed to the Board of which 86,000 are freehold. In addition there are more than 2,000 farmhouses and agricultural cottages. Some colliery villages with their village halls, schools, etc, are owned entirely by the Board.

(g) *Other Buildings*

The Board own offices, shops, hotels, swimming baths, a cinema and a slaughter house.

(h) *Miscellaneous Assets*

These vary from private railways, wharves and coal-selling depots to retail milk rounds, a holiday camp, and a cycle track

CHAPTER II

THE FIVE-DAY WEEK

Negotiations

46 Before the appointment of the Board there had been discussions between officials of the Ministry of Fuel and Power and the National Union of Mine-workers about the possibilities of a five-day week. At the conclusion of those discussions in June, 1946, the Minister of Fuel and Power had announced in the House of Commons that the Government had no objection to the introduction of the five-day week if it were properly organised and the country's needs of coal were met. Timing and conditions were left to the National Coal Board, when formed, and the Union.

47. The Board, for their part, regarded the five-day week as desirable in the industry. The men who worked underground were entitled to two days' light and air. The "Reid Report" * recommended that, on technical grounds alone, there was a strong case for introducing a five-day week of eight hours a day; it stressed the advantage of leaving the week-end free for repair and maintenance work. In 1946 the Board had to decide when it would be reasonable to introduce a shorter working week for which the mineworkers had pressed for so long. The question arose in two ways. Could the country afford the early introduction of the five-day week? Alternatively, could the country afford to defer it? The stakes were high and the Board had to play. It might mean loss of output when output had to be increased. It might also mean higher costs. On the other hand, men had to be retained in the pits and new recruits had to be attracted. To decide in favour of early introduction would be a gesture which might do much to improve the spirit of the industry and give an impetus to effort. To decide against it might revive fears and suspicions and lead to unrest in the coalfields. Statistical forecasts of effects of the five-day week were inconclusive, but the representatives of the mineworkers strongly urged that an organised five-day week would yield more coal than a six-day week with attendance on Saturdays and Mondays often poor and irregular. The Board received an assurance from the Union of their full co-operation in securing the output of coal needed. The Board consulted the Government and in December, 1946, declared themselves in favour of early introduction of the five-day week. They undertook to settle the conditions by March—in negotiation with the Union or, failing agreement, refer them to arbitration. Then, the date for the inception of the five-day week would be 5th May, 1947, or a month after the arbitrator's award. This was subject, if necessary, to the Government's authorisation.

48. The negotiations about conditions continued throughout January and February of 1947. The Union's claim was for a reduction of the length of the working week to five days without loss of pay. The working hours below ground were to continue to be $7\frac{1}{2}$ plus "one winding time" as laid down in the Coal Mines Acts. The national interest required that the five-day week should be introduced under conditions which would safeguard the country's coal supplies. Under a five-day week production had not only to be maintained, but increased. There must be regular working during the five days, with a reduction in absenteeism and with greater output per man per day. To secure better attendance the Board proposed, and the Union agreed, that if a man were to be paid for one more shift than he actually worked, he should be entitled to this payment as a bonus only if he worked the full five shifts. Therefore, though some men would work fewer shifts (those who had previously worked the full six shifts), others had a strong incentive to work more: those who had been in the habit of working only three or four shifts would now be encouraged to work five.

49. Improved attendance could help to make good the loss of output on Saturdays. Even more important was the need to increase output per man per day. It would be necessary for every man who was not already working at full stretch to agree to perform a larger task than he had done under the six-day week. Old customs under which men left the pit before the end of the shift, when their "stunt" was done, would have to be abandoned. Increased tasks—working an additional length of coal face, or reducing the number of men working on a face in order to man new ones—were to be fixed locally by agreement between the colliery management and the men, or, failing

* Report in 1945 of the Technical Advisory Committee appointed by the Minister of Fuel and Power in 1944. [Cmd 6610.]

agreement, by means of the conciliation "machinery". The Board would not make the bonus payment to men who persistently left their work before the end of the shift, because this would mean that they were not doing a reasonable day's work.

50. When the men underground got the five-day week, the men who handled the coal on the surface would also have to do their work in five days. As the intention was to produce more coal each day under the five-day week, this meant that some of the surface workers would have to do longer hours; and it was agreed between the Board and the Union that the hours of work of these men should be $42\frac{1}{2}$ in a five-day week, instead of $46\frac{1}{2}$ hours generally worked in a six-day week. This would mean an increase in daily hours at many collieries. An exception was made for those surface workers who, under an existing district agreement, had a shorter working week than $42\frac{1}{2}$ hours.

51. It remained to settle the amount of the bonus payment both for underground and surface workers. It was agreed that a man paid a daily rate should receive as his bonus payment his average day wage during the week, and a piece-worker should receive as bonus 16 per cent of his earnings over the five days, excluding overtime. For piece-workers, therefore, the bonus was not only an incentive to greater attendance but it was also an incentive to greater effort. The more work they did the greater the bonus.

52. The negotiations between the Board and the Union were completed in March. Agreement had been reached on every question, and arbitration was not required. Conditions were included which, if they operated fully, should safeguard coal production, many mineworkers would be required to accept increased tasks, and the bonus depended on full attendance. When the negotiations were brought to a close the labour force was rising, attendance had improved, and production was more than it was in the corresponding period of the previous year. But the country was still in the grip of the fuel crisis and the fuel supply situation remained grave. The amount of coal being got on a Saturday was about 350,000 tons. It would be for the mineworkers, by loyally accepting the conditions negotiated with the Union, to make good the loss of production by intensive working of a five-day week. Any holding back, any reluctance to abandon the restrictive practices of the past might mean disaster. There would be a risk in introducing the five-day week in May, but there would have been a risk in disappointing the great expectations which had been raised in the minds of the mineworkers.

53. The Board reported the results of the negotiations to the Government and asked the Government whether they were authorised to sign an agreement. The Government authorised the Board to do so. The Agreement between the Board and the Union was signed on 18th April, 1947. It was to come into force on 5th May, as already agreed. A copy of the Agreement appears at Appendix IV.

54. While the negotiations took their course, the Divisional Boards were doing the preparatory work in the coalfields. In some parts of the country an eleven-day fortnight was being worked, in others six days a week, and there was often overtime work at the week-end in addition. Much detailed planning had to be carried out at the collieries. To allow for the extension of the daily tasks, and for better attendance each day, new coal faces would have to be opened and old ones enlarged. Underground haulage would have to be adapted to serve the new faces and handle the expected increase in the daily output. Arrangements for transporting the mineworkers to and from work would have to be revised; the supply of railway wagons to the collieries would have to be

re-arranged, since more wagons would be required on each of the five normal working days, repair and maintenance work at collieries would be concentrated into the week-end so as to interfere as little as possible with coal-getting.

Results

55. The coal output target for the year had been set by the Government at 200 million tons, of which the deep mines would have to produce 190 million tons. By the time the five-day week was introduced, deep-mined output had reached 65 million tons, leaving 125 million tons to be produced over the remainder of the year. Allowing for holidays, there were 32 full working weeks left in the year, and therefore to reach the target deep-mined output would need to average rather more than 3·9 million tons a week. Production had reached this figure only once in 1946—in the so-called Christmas “bull” week, and so far only once in 1947. Under the five-day week, production would have to rise above what had previously been the normal rate. With the Saturday production lost, the mineworkers would have to work much harder and attend more regularly during the five normal shifts. If the introduction of the five-day week in 1947 was to justify itself, the process of agreeing on increased daily tasks would have to be pushed forward urgently in an atmosphere of responsibility and goodwill.

56 In the first five-day week, output fell by nearly 300,000 tons but of this amount 170,000 tons was accounted for by the bank holiday in Scotland. In the following week output returned to what it had been before the five-day week and was maintained in the next week. Even so, in these two weeks it was nearly 100,000 tons below the average of 3·9 million tons which was required. Then came Whitsun, and output dropped to 2·9 million tons for one week. The next week it recovered to about 3·7 million tons. It remained at this rate until the last week in June when it fell again owing to summer holidays. After the holidays there was another recovery. By October the rate was between 3·7 millions and 3·8 millions.

57 In negotiating the Five-Day Week Agreement nationally, many complications had been encountered. Its application in the coalfields also brought difficulties. Dissatisfaction among surface workers in Lancashire, whose daily hours had been increased by the Agreement, was a brake on production during the early weeks of its operation, and in the last week of June nearly 60,000 tons were lost through a strike among the surface workers. The Grimethorpe strike (described in the next chapter) which began in August was more serious. It arose out of unwillingness on the part of the men to abide by a decision made under the Conciliation “machinery” that daily tasks should be increased as provided in the Five-Day Week Agreement. It cost the country nearly 600,000 tons of coal. In these and other disputes about the application of the Five-Day Week Agreement, some 800,000 tons of coal in all were lost.

58 The success of the five-day week depended on a general acceptance of increased tasks. It had not been expected that tasks could be increased at every colliery; at some collieries men were working hard before the five-day week and could not reasonably be expected to do more. Time was needed in other cases to revise tasks, vary old customs and conclude difficult negotiations for new “price lists” governing the pay of piece-workers and others. In many instances, the mineworkers did accept increased tasks. The experience varied from coalfield to coalfield and from pit to pit. Taking the country as a whole, the response to the appeal by Board and Union for greater tasks was disappointing.

59. There was, however, some improvement in daily effort. Output per manshift at the coal face rose from 2·79 tons in March and April to 2·88 tons in May and June, and output per man-shift "overall" increased from 1·04 tons to 1·08 tons. Often, this was attributable not to an acceptance of increased tasks but rather to an improvement in the performance of existing tasks. In some collieries too the layout and system of mining were such that there were no fixed tasks, and increased output per day was possible without negotiations about revised tasks and without big technical changes. Existing tasks at many collieries were now regularly completed and at the end of each shift the coal face was left better prepared for operations during the next shift.

60. The figures for absenteeism also showed an improvement. They declined from 15·03 per cent in March and April, to 9·13 per cent in May and June, though part of this decline may well have been due to the existence of the five-day week itself which reduced the number of days on which a man could be an absentee.

61. The results of normal five-day working which began in May and ended at the beginning of November were partially obscured by the effect of the summer holidays. In May to October about 900,000 tons more coal were produced than was produced in the corresponding months of 1946, and a further 800,000 tons would have been produced but for disputes (see paragraph 57 above). On the other hand, the labour force in 1947 was greater than it was in 1946 (though many of the new recruits were untrained). What the output would have been in 1947 if a six-day week had been worked throughout is a matter of guesswork. It soon became plain that at the current rate of output under normal five-day week working the industry would not achieve its target for the year. The negotiations leading up to the extension of working hours are described in Chapter IX below.

62. One of the reasons for introducing the five-day week was to make the industry more attractive, so as to retain its workers and bring in new ones. Any attempt to assess the results of the shorter week should take into account the probable effects it had on recruitment during 1947. During the year 94,000 new workers were attracted into the industry, while 68,000 left it. The net increase in the labour force was therefore 26,000, compared with a net decrease of 4,200 in 1946.

CHAPTER III

THE BOARD AS EMPLOYER

The New Public Service

63. This chapter is about human relationships. Machines, schemes and plans are nothing without the human genius, skill and effort which alone can put them to use. The human material of an industry is more than its chief asset, it is the industry itself. It must be given opportunities for free and full development. Any organisation must deal honestly with its workpeople if it is to prosper, but a nationalised industry, existing only to serve public ends, must set an example in the way it treats its employees, enlarges their opportunities and encourages their efforts.

64. In the coal industry, relations between employers and employed were not always good. Old grievances and old disputes had produced bitternesses. By meeting just claims, the Board hoped to infuse a new spirit into management and men, now partners in a new public service. For the mineworkers, this meant valuable concessions and an enhanced status. But with these privileges

came new responsibilities. All in the industry must exercise self-discipline and moderation. In wages negotiations, for example, it is still necessary for the Unions to represent the interests of the men, but representations must be made with a due sense of public responsibility, since concessions for mine-workers can often only be obtained at the expense of the workers in other industries and indeed of the community at large. For management, too, the psychological environment has changed. There is a new pattern of loyalties, new responsibilities and new opportunities of service. All this is implied in public service—opportunities for all, sense of purpose, a responsible employer acting in concert with responsible employees in the joint service of the community.

65. The Coal Industry Nationalisation Act itself laid many duties on the Board as a good employer. Their policy has to encompass the safety, health and welfare of their employees, and the practical knowledge and experience of the employees have to be applied in the conduct of operations.

Conciliation

66. In particular, the Board are required by the Nationalisation Act to consult the Trade Unions about setting up "conciliation machinery." This implies that the Board and the Unions together should work out a system for negotiating wage rates and conditions of employment in the industry, and for settling disputes. By the end of 1946 the Board had already agreed on conciliation procedure with the National Union of Mineworkers, which covers most of the workers in the industry.

67. The arrangements made with the N.U.M. provided for conciliation at three separate "levels"—national, district and pit. These arrangements were partly adaptations of schemes already working before nationalisation. Questions which may concern every colliery in the country are dealt with by the National Conciliation Scheme. Narrower issues affecting particular coalfields are settled by the District Scheme, while matters which concern individual pits, and raise no question of principle affecting the coalfields or the country as a whole, are dealt with by the Pit Conciliation Scheme.

THE NATIONAL CONCILIATION SCHEME

68. The National Scheme was adopted by an agreement with the N.U.M. signed on 5th December, 1946. It is mainly a continuation of the scheme agreed between the Mining Association and the N.U.M. in May, 1943. It provides for a National Conciliation Board consisting of a Joint National Negotiating Committee and a National Reference Tribunal. Questions arising between the National Coal Board and the Union are discussed by the Committee and, failing agreement, are referred to the Tribunal for a decision. The Negotiating Committee consists of the nine members of the National Coal Board and not more than 14 members of the National Union of Mineworkers. The National Reference Tribunal was continued with the same membership as it had before nationalisation—Lord Porter (President), Sir Frederick Rees, and Professor T. M. Knox. During 1947 the Negotiating Committee met 24 times and discussed many important matters. Among other things, the Committee's work resulted in the signing of a number of agreements between the Board and the N.U.M., including agreements on the five-day week, payment for statutory holidays, extension of hours, and the increase in minimum wages. No question had to be referred to the National Reference Tribunal during the year.

DISTRICT CONCILIATION SCHEME

69. The agreement with the N.U.M. for the setting up of a National Conciliation Scheme also provided that district conciliation schemes that had existed in the past should be continued with modifications. The Board suggested that the N.U.M. should change their districts to conform with the Board's Divisions, but the Union could not see their way to doing this. Where, therefore, there was more than one N.U.M. district in one of the Board's Divisions, there have had to be separate district conciliation agreements with each of the districts concerned. By the end of the year agreements had been signed with all the districts except one. The exception was Cumberland where delay was caused by the existence of two separate Conciliation Boards, set up under the 1943 agreement—one dealing with miners and the other with enginemen and boiler-men. Each of the District Schemes consists of a Conciliation Board which conducts negotiations, and a District Referee to whom questions are referred when the Conciliation Board cannot agree. In most districts Conciliation Boards met during the year to discuss the carrying out of national agreements reached by the Joint National Negotiating Committee. In some districts no formal meetings were necessary; negotiations were carried out informally between Divisional Boards and local N.U.M. officials.

PIT CONCILIATION SCHEME

70. The aim of the Pit Conciliation Scheme—adopted by a national agreement between the Board and the N.U.M. signed on 1st January, 1947—is that questions arising between workers and management at the pit shall be dealt with quickly and efficiently. Briefly, the method adopted is as follows. Any question in dispute at a pit must first of all be discussed as soon as possible between the workmen and the official immediately concerned. Failing agreement within three days, the matter must again be discussed between the men concerned and the manager of the pit or his representative. If agreement is still not reached, the men report the dispute to the local Trade Union official who decides whether the question shall be taken up by the Union. If further discussion with the management does not produce settlement, then the Trade Union official must write to the colliery manager asking for a meeting to be held between representatives of the Union and the management (or, if the question is one raised by the management, then the manager must write to the Union). This brings into operation the "pit meeting" which must be held within five days of the request being made. At this meeting Area officials of the Union and Area or Divisional officials of the National Coal Board may be present. Agreed copies of minutes are given to both sides. If the dispute is still not settled within 14 days after the pit meeting it must then be referred to the joint secretaries of the District Conciliation Board, who must refer it immediately to a Joint Disputes Committee specially set up under the Pit Conciliation Scheme to deal with pit disputes. Membership and rules of procedure of these Disputes Committees are determined by the District Conciliation Boards and vary in each district. In some districts, in addition to the main disputes committee, sub-committees have been set up specialising in disputes arising over such matters as the five-day week or the guaranteed wage. Some of the Disputes Committees consist of two members from each side, but some have as many as 17 members. In some districts they meet regularly, whereas in others (for example, in East Midlands) they only meet when a dispute is referred to them. If the Disputes Committee cannot agree on a matter put before them, then it is referred to an umpire selected from a panel appointed by the District Conciliation Board. An assessor nominated by each side must be present at all hearings by the umpire. This is the last stage in the Pit Scheme and

unless it is decided that the dispute raises questions of principle applying to the coalfield or country as a whole, the umpire's decision is final. Both the Board and the N.U.M. have agreed to accept any settlement reached at any stage in the scheme. If, therefore, everyone concerned keeps to the rules laid down, there should never be any need for a strike.

DISPUTES DURING 1947

71. It is hard to say how successful the Pit Scheme was during the year. Superficially the Scheme was a success in that there were no official strikes sponsored by the N.U.M., but there were 1,635 unofficial strikes—where men stopped work in defiance of their Union—compared with 1,329 strikes in 1946. The output lost in 1947 through these strikes was estimated at 1,652,000 tons, compared with 770,000 lost in 1946. There were, however, two special causes which made disputes more likely in 1947. The first was the lifting on 30th June of a ban (imposed by a national agreement signed in April, 1944, between the Union and the colliery owners) on changes in wage rates at particular collieries. When this ban was lifted there were accumulated demands for wage revisions which made disputes more likely. The second special cause of disputes was the introduction of the five-day week. This altered the relative earnings of different classes of workers and of workers in different districts, and made some discontent inevitable. The reassessment of tasks required by the Five-Day Week Agreement was also bound to lead to differences of opinion between men and management. That these were the main cause of disputes during the year is shown by the following estimate of the output lost, split up according to the cause of dispute.

ESTIMATED OUTPUT LOST THROUGH DISPUTES IN 1947

Cause of Dispute	Number of Stoppages	Loss of Output (Tons)
Dissatisfaction about Wages	716	534,000
Application of the terms and conditions of the Five-Day Week Agreement	78	838,000
Personnel and grading questions	64	26,000
Working conditions	130	24,000
Methods of working and colliery organisation	180	80,000
Refusal to accept alternative work	114	37,000
Refusal to perform work not completed on a previous shift	44	11,000
Refusal to await repairs after a mechanical breakdown	53	12,000
Objection to, or disputes with, officials	22	8,000
Sympathy with dismissed or suspended workmen	56	22,000
Miscellaneous	178	60,000
	1,635	1,652,000

From this it may be seen that about half of the total loss was caused by disputes over the Five-Day Week Agreement.

72. Without the Conciliation Schemes, and the loyal attempts of most of the people in the industry to make it work successfully, there would certainly have been many more strikes, causing a much greater loss of output. In 1947, experience of the working of the Scheme varied considerably in different parts of the country. In Scotland, for example, 61 disputes were referred to the

umpire during the year, compared with only one dispute in the East Midlands Division and none in the West Midlands. In some Areas there was a tendency for some of the men to ignore the Conciliation Scheme completely and to stop work immediately they felt they had a grievance. In Monmouthshire, even lodge officials of the Union defied the executive and organised an unofficial strike involving 15 collieries and causing a loss of 18,000 tons. In the West Midlands, on the other hand, at the West Cannock Unit, men who went on strike admitted their error later and more than made good the loss in output by attending at the pit on the following Saturday and working at "plain time" rates. As men and managers become more familiar with the Scheme and gain confidence in its fairness, strikes should become fewer and farther between. This will take time.

73. Some 900,000 tons of the total 1,652,000 tons lost through disputes was accounted for by four strikes. The most important was the strike arising out of the dispute at Grimethorpe colliery which caused a loss of output of 594,000 tons. An account of this strike follows.

THE GRIMETHORPE STRIKE

74. One of the main principles on which the five-day week was based was that the workmen should do a fair day's work on each of their five shifts in the normal working week. This principle was expressly set out in Clause 11 of the Schedule to the Agreement (reproduced at Appendix IV). On 8th April, 1947, a meeting was held between members of the North Eastern Divisional Board and officials of the National Union of Mineworkers (Yorkshire Area) at which reassessment of tasks was discussed. The meeting agreed that a joint letter should be sent on this subject from the Divisional Board and the Union to the management and Pit Production Committee of every pit in the Division, and to local branch officials of the Union. The letter—sent on 12th April—stressed the need for reaching agreement as soon as possible on the reassessment of tasks. One of the first things considered by the management was the time taken by the men to complete the task they were then performing. Where men were habitually finishing their work well before the end of the shift, the management proposed that the task should be increased. Under Clause 1 of the Schedule to the Five-Day Week Agreement the hours per shift for an underground worker are $7\frac{1}{2}$, plus "one winding time".

75. At Grimethorpe colliery there were four units working in the Meltonfield seam, namely Nos 10's, 14's, 16's and 18's units. The number of fillers on these units were 44, 22, 22, and 44, respectively. Before the introduction of the five-day week most of the fillers on these units were finishing their work and leaving the pit at times varying from $5\frac{3}{4}$ to $6\frac{1}{2}$ hours. Only in a few exceptional cases was any man required to work overtime in order to complete his task. During the four weeks immediately before the introduction of the five-day week, out of a total of 13,811 man-hours worked, only $23\frac{1}{2}$ man-hours were paid at overtime rates. Proposals for reassessment of the tasks in this seam were accordingly put forward by the management at two meetings of the Pit Production Committee on 12th and 19th April, 1947. Evidence was given about the times when the men were checking out. The N U M members of the Pit Production Committee agreed to place the proposals before the workmen at a branch meeting to be held on Sunday, 20th April. A Pit Meeting under the Conciliation Scheme was held on Tuesday, 22nd April, when the workmen's branch secretary reported that the branch meeting had instructed him to refuse any increase in the task of the workmen concerned. The matter was then referred to the Disputes Committee—the next stage in the Pit Conciliation Scheme. At this time many cases arising out of the reassessment of tasks were

being dealt with by the Disputes Committee. The Committee consisted of two representatives of the Divisional Board and two representatives of the N.U.M. The Union members were respected pitmen from neighbouring pits. The Board members were officials who had wide pit experience. This Committee held five meetings, the first on 12th June and the last on 17th July, of which three were in the office and two at the pit. At the meetings in the office full evidence was submitted to the committee by representatives of both management and workmen. At one of their pit visits the committee went underground and inspected the furthest working face where they were informed that conditions were less favourable for coal getting than at the other three faces. This unit was 14's. The face was carefully examined by three members of the committee, the fourth member, one of the National Coal Board representatives, being unable to be present at that time. Each of the three who were present took part in the detailed examination that was made of the face. The Disputes Committee found unanimously that "so long as the faces remained in their present condition, the number of men on the faces should be reduced as follows :

No 10 face	40 instead of 44
No. 14 " "	20 " " 22
No. 16 " "	20 " " 22
No 18 " "	41 " " 44 "

The result of this reduction in the number of men on each face would have been to increase the stint of each workman by about 2 feet, from 21 feet to 23 feet. The report was dated 23rd July, 1947. After being submitted to the Divisional Board and the N.U.M., it was sent to the colliery manager on 31st July. On receipt of the Committee's report, the manager met the Branch Secretary of the Union in order to arrange with him for putting the recommendations into force. The manager agreed that the men should be interviewed and informed of the proposals, and accordingly met two men from each of the four units on 8th August. He described to them the method by which the decision had been reached and his proposals for putting it into operation. He arranged that the reduction of the number of men on each face should take effect for 10's and 18's units from Monday, 11th August, and for 14's and 16's units from Tuesday, 12th August. It was further arranged that the Branch Secretary should give full information on the matter at the Branch meeting on Sunday 10th August.

76. On Monday, 11th August, the chargemen from 10's and 18's units informed the manager that the men would not agree to the proposals. The men withheld their labour from that day. The men on 14's and 16's units went on strike the following day. The Divisional Board considered the matter at their meeting on 15th August. They took the view that the men's action in withholding their labour amounted to repudiation of their contracts of service. Nevertheless, the Divisional Board wished to keep open the door for a return to work. They informed the workmen they would overlook this repudiation in the case of those workmen who returned to work on Monday, 18th August, but there was no response to this offer. A fortnight later the Board were still prepared to waive the repudiation and to allow the workmen to return without signing new contracts, provided they did so on the basis of the finding of the Disputes Committee. Again, there was no response. With the exception of a partial stoppage at Ferrymoor colliery on 20th August, the dispute was confined to Grimethorpe colliery until 27th August, when the men at the Frickley and Hatfield collieries went on strike in sympathy with the Grimethorpe men. Between 27th August and 15th September, when the Grimethorpe men finally returned to work, the trouble spread to other collieries in the Division. Altogether, 63 collieries were affected, and some 594,300 tons of coal were lost.

77. The National Union of Mineworkers (Yorkshire Area) held mass meetings to try to persuade the men to return to work. At one of these, the men were addressed by the Minister of Fuel and Power, the Rt. Hon. E. Shinwell. These meetings were unsuccessful. The T.U.C. suggested that the men should return to work and that a Fact Finding Committee should be appointed by the N.U.M. (Yorkshire Area) to make a full investigation. At the request of the National Coal Board, the Chairman, Deputy Chairman and the Labour and Production Directors of the Divisional Board met the National Coal Board in London on 5th September. The Minister of Fuel and Power and representatives of the N.U.M. were also present at this meeting. This meeting agreed that, provided the Grimethorpe men returned to work on the conditions set out in the Disputes Committee's report, the Fact Finding Committee, suggested by the T.U.C., should carry out an investigation and report to the N.U.M. (Yorkshire Area). As the faces had deteriorated during the stoppage, the Board agreed with the Yorkshire Area of the N.U.M. that as many men as necessary should be employed in order to restore the faces to normal, but that as soon as the management and Fact Finding Committee considered that normal conditions had been restored, the men should comply with the findings of the Disputes Committee. The men at Grimethorpe and the other collieries where strikes had taken place, returned to their work on Monday, 15th September. The Fact Finding Committee then began its investigations.

78. Arrangements were made by the management for extra men to be placed on the faces until they became normal. When they were back to normal, however, the men were not willing to take the extra stint as provided in the Disputes Committee's finding. In view of the danger of a further strike and consequent loss of output, the Divisional Board did not insist, at that stage, upon the extra stint being taken. They decided to rely upon negotiations with the officials of the N.U.M. (Yorkshire Area) who, it was hoped, would eventually be able to persuade the men to agree. The Fact Finding Committee is understood to have reported its findings to the N.U.M. (Yorkshire Area) on 30th September. At a meeting held on 13th October between representatives of the Divisional Board and officials of the N.U.M. (Yorkshire Area) the N.U.M. alleged that owing to the haulage arrangements at the colliery there was an undue amount of "waiting time". Accordingly, the men could not be expected to fill off the increased stint in the shift. It was agreed that representatives of the Board and the men should go to the colliery during the following week and keep a record of all waiting time on the four units. When this record had been considered it was agreed to hold a further meeting. This was held on 25th November when the question of waiting time was discussed. It was proved that the excessive amounts paid as waiting time were not due to faults in the haulage system but to the fact that at this colliery, from 1942 onwards, there had been a practice for overtime to be paid for all stands, no matter how short the period of such stand. The Union's representatives then suggested that the matter should be further deferred until the new year when they hoped to find a suitable opportunity of persuading the men at Grimethorpe to work in accordance with the report of the Disputes Committee. The Board's representatives agreed to this suggestion.

Recognition of Negotiating Bodies

79. The Board have the statutory duty of developing conciliation "machinery" for all sections of the Board's employees and not only those represented by the National Union of Mineworkers. During 1947 the Board considered the claims of other organisations to be recognised for this purpose.

80. *The British Association of Colliery Management* was formed to represent the managerial grades of the industry. The National Association of Colliery Managers had previously been the only body representing colliery managers, but it was essentially a professional organisation ; its membership and functions were restricted. In particular, it was precluded by its Charter from negotiating terms and conditions of employment on behalf of its members. The British Association of Colliery Management, on the other hand was registered as a Trade Union, and could negotiate. The Board recognised its right to negotiate on behalf of many of the managerial grades. There were, however, borderline cases and these were under discussion between representatives of the Board and the Association at the end of the year.

81. *The National Association of Colliery Overmen, Deputies and Shotfirers* also claimed recognition. There was no doubt that the Association could speak for most Deputies, and they were recognised as representing this grade. It was agreed that conciliation machinery should be established as soon as possible between the Board and the Association covering the Deputy grade. Overmen and Shotfirers presented greater difficulty. The National Union of Mineworkers (and its newly-affiliated body known as the National Federation of Colliery Officials and Staff) also had Overmen and Shotfirers among their members. The Board agreed to negotiate about Overmen and Shotfirers with the National Association of Colliery Overmen, Deputies and Shotfirers and the National Union of Mineworkers acting jointly.

82. *The British Association of Colliery Officials and Staffs*, formerly known as the Yorkshire Association of Colliery Officials and Staff, embraced grades from Deputy to Mining Agent, and from Clerk to General Manager. There was thus an overlap with other organisations, which had opposed it from the start. As the Association was strong only in parts of the Yorkshire coalfield, the Board did not feel justified in recognising it. However, where in the past the Association had agreements with the previous owners covering individual collieries or groups of collieries, the Board honoured these agreements. The Association was later merged in the British Association of Colliery Management.

83. *The National Union of Colliery Winding Enginemen* was formed in January, 1947. It was composed of several district unions some of which had broken away from the National Union of Mineworkers. Later it included the South Wales and Monmouthshire Winding Enginemen's Association and the Cannock Chase and Pelsall Winding Enginemen's Association. The Board could not regard the Union as an organisation qualified by membership to negotiate on a national basis on behalf of the winding enginemen. The winding enginemen in the National Union of Mineworkers were covered by the conciliation scheme agreed with that Union. Arising out of the efforts of the National Union of Colliery Winding Enginemen to seek recognition, there was a strike of their members in Durham immediately after the introduction of the five-day week. The Monmouthshire and South Wales Winding Enginemen's Association was in a special position. It represented nearly all the winding enginemen in that coalfield and had an agreement with the colliery owners. This agreement was taken over by the Board on the vesting date and the Board recognised the right of the Association to negotiate locally.

84. *Organisations representing Workers at Coke Oven and By-Product Plants.* Before nationalisation, three Unions were concerned, namely, the National Union of Blast-furnacemen, Ore Miners, Coke Workers, and Kindred Trades, the National Union of General and Municipal Workers and the National Union of Mineworkers. The first of these Unions withdrew from this field. A working arrangement was then made between the other two Unions. The National

Union of Mineworkers undertook to carry out negotiations on behalf of the members of both organisations. At the end of the year the draft of a National Conciliation Scheme was under consideration.

85. Clerical Staff Most of the Board's clerical staff work at collieries and at Area Offices, and were employed in the industry before nationalisation. Two Unions claimed the right to negotiate with the Board on their behalf, namely, the National Union of Mineworkers, and the Clerical and Administrative Workers Union. The Board had consulted the Trades Union Congress in 1946 about the representation of clerks, but at that stage the T U C could not recommend that one Union rather than the other should be recognised. Both Unions had wages claims to put forward. The Board for their part wished to negotiate about wages for their clerical staff as soon as possible. They asked that the two Unions should make an arrangement to negotiate jointly with the Board; otherwise, negotiations would be difficult and prolonged. Although both Unions saw the Board's point of view, they could not agree on an arrangement satisfactory to both. In August, 1947 the Board again asked the Trades Union Congress to intervene, but even then the Unions failed to reach agreement. The Board then entered into separate negotiations with each Union.

Wages Negotiations

86 During the early months of 1947 the Board negotiated with the National Union of Mineworkers about the five-day week. This has been described. In the closing months they negotiated agreements with the Union for the extension of working hours and for raising the wages of the lowest paid mineworkers. These negotiations will be described in Chapter IX. There were other important negotiations with the N U M and other Unions during the year.

87 In 1946, the Board had agreed with the National Union of Mineworkers about the statutory holidays to be taken at Christmas, 1946, and the New Year. In 1947 the Board and the Union reached a permanent agreement about statutory and customary holidays through the year. Six days in the year would carry payment. One of the advantages of the Agreement was that the days to be taken in each coalfield were specified, thus eliminating troublesome variations, sometimes even between adjoining collieries. Summer holidays with pay were also discussed later between the Board and the Union. It was agreed that as in 1946 there should be a week's holiday with pay.

88. The Five-Day Week Agreement led to claims for similar benefits from other classes to whom the Agreement did not apply. The Agreement was designed for the underground worker, but it also covered a number of surface workers at collieries who would no longer be needed on 6 days a week. There were many classes of worker employed in and around collieries (including coke oven workers) who were engaged on tasks not directly connected with coal-getting. The Agreement did not apply to them. For a long time it had been the practice to apply to many of the workers in ancillary undertakings agreements relating to mineworkers. Other workers doing similar jobs had their wages and conditions determined by the decisions of the Joint Industrial Council for their particular industry or by separate local agreements. The Union claimed that past practice should continue. The Board for their part were ready to agree, but if the five-day week were thus extended to many of the Board's ancillary activities there might be repercussions on other industries. The Board brought the matter to the notice of the Government. The Minister of Labour then appointed a special Committee of Investigation, and the Committee recommended acceptance of the proposal provisionally agreed between the Board and the N.U.M. The Government authorised the Board to adopt it, and this was done.

89 It was necessary to maintain the relationship between the conditions of employment of the mineworkers and of the junior colliery officials. The first rung of the "ladder" is the post of Deputy, and the next, Overman. It is from these grades that many of the colliery managers and senior production officials are drawn. Once the terms of the Five-Day Week Agreement for mineworkers were settled, the Board entered into negotiations with the National Association of Colliery Overmen, Deputies and Shotfirers, which represented the Deputies. Like the mineworkers, the Deputies were paid by the day. They were underground workers. Many would not be needed on Saturday when five-day week working began in the pits. They were granted the benefits of the five-day week from 5th May. There were further discussions later in the year between the Board and the Association about the wages of Deputies. The Board agreed that there was a case for reviewing the wages of the Deputies in the light of general changes which had taken place in wages in the coal industry. Deputies' wages were accordingly reviewed in each Division, and were increased by adding not more than 5s. to the shift rates. The increased wage was not to exceed the average shift earnings of piece-workers in the Division or wages district.

90 Overmen, the officials immediately senior to Deputies, were paid by the week and not by the day. The Five-Day Week Agreement, under which a man paid by the day received at the end of five days an extra day's pay, could not therefore apply to them. Even with five-day week working in the pits, many had to attend on Saturday to supervise maintenance work, and all had to be ready to attend. There were, however, grounds for reviewing Overmen's earnings. The National Association of Colliery Overmen, Deputies and Shotfirers and the N.U.M. each represented a substantial number of Overmen. Negotiations were entered into with both Unions jointly. An Agreement was signed on 4th November, 1947. It provided that while hours of work would remain as before, Overmen were not to be paid less per week than a Deputy at the same colliery would be paid who worked six shifts, that is, five normal shifts and one overtime shift. That would be the minimum. The actual rates were settled by Divisional Boards in the light of local circumstances.

91. There was another group of weekly-paid employees at the collieries—the so-called "weekly-paid industrial staff", consisting mainly of foremen in surface occupations. There were about 7,000 of these men. In the past their wages and conditions of employment were not usually regulated by collective agreements. They were settled by direct arrangement between employer and employee, and they varied widely from place to place. After discussions with the N.U.M., and with their agreement, the Board arranged towards the end of 1947 for the wages of this staff to be reviewed locally in the light of general wages changes which had taken place in the coal industry.

92. There remained clerks and junior administrative staff, of whom there were some 30,000 in the coal industry. Negotiations between the Board and the two Unions who had been recognised as representing clerks at Area and colliery offices began in November. These negotiations covered rates of pay, hours of work and other conditions of service. Negotiations on all points of principle were completed in December, but Agreements were not signed until the next year.

93 There were conspicuous differences in the salaries of clerks between districts and between collieries in the same district. Grants of allowances in kind also varied widely. Some colliery clerks received free coal, and many lived in colliery houses free of rent. If in the future there was to be a uniform salary pattern, it would be possible to treat clerical staff as part of a single service

in which there could be transfers from one office to another, and opportunities for promotion could be widely spread. The Board and the Unions agreed that the clerks and those who supervised them should be assigned to grades to which salary scales were attached. The scales were settled after a review of clerical salaries in other organisations and of salaries fixed by agreements between the Unions and the former owners. Those clerks who were previously earning more than they would get under the new scales were to keep their existing salaries; those who were earning less would have their salaries increased. The new salaries were inclusive of the value of perquisites, and accordingly all staff would pay for the coal they received and pay rent to the Board if they lived in a colliery house.

94. The scales related to a normal working week of 38 hours exclusive of meal-times. Wherever possible the normal hours would be worked on five days of the week, though Saturday continued to be a normal working day and most staff would have to attend on Saturdays. A working week of standard length, with standard payments for overtime, was an innovation for many colliery clerks

Consultation

95. Consultation is at once a means of tapping the knowledge and experience of the industry's employees, and of fostering a spirit of co-operation between management and men. It mobilises the collective common sense of everyone, and provides a means by which it can be put to good use. Men work better—just as they fought better during the war—when they fully understand the point of what they are doing. By consulting together they also learn to trust one another—and therefore to work together in an atmosphere of mutual respect, good fellowship, and pride in a job well done.

96. The idea of consultation between workers and management in the mining industry is not new. It was suggested in 1917 and was envisaged in the Mining Industry Act of 1920. During the 1939/45 war the Government encouraged the setting up of Joint Production Committees in the main war industries. In the mining industry, Pit Production Committees were first set up in 1940 and re-cast in 1942 with the task of "discussing and advising on all questions of production and increasing output". Nationalisation gave a much wider scope for consultation.

97. Under the Nationalisation Act the Board are given a general instruction to secure "the benefit of the practical knowledge and experience of their employees". More specifically, they are committed to join with the Trade Unions and other organisations representing their employees in working out schemes for consultation on the "safety, health and welfare" of the people in the industry, and also on "the organisation and conduct of the operations in which they are employed." This consultation covers everything affecting employer and employees, except wages and conditions of employment, which are covered by the Conciliation Schemes. Through consultation the Board are helped by their employees to solve the industry's problems, but the Board must remain solely responsible for all decisions taken.

98. During 1947 the Board agreed on a consultation scheme with three organisations representing most of the industry's employees. The scheme provided for a National Consultative Council to discuss matters of national interest, and similar councils at Divisions and Areas. At each colliery there was to be a Colliery Consultative Committee.

CONSULTATION WITH ORGANISATIONS

99 The setting up of the National Consultative Council has been referred to in the 1946 Report. The Council has 27 members—six appointed by the Board, nine by the National Union of Mineworkers, nine by the National Association of Colliery Managers and three by the National Association of Colliery Overmen Deputies and Shotfirers. Its Chairman is the Chairman of the National Coal Board. The Council is precluded by its terms of reference from dealing with wages or terms of employment, which are dealt with by the Conciliation Schemes. By the end of 1947 it had met seven times. During the year three separate committees were formed to discuss production, safety and health, and recruitment, education, training and welfare. Among other matters the Council discussed the problems of production, the staggering of holidays, the supply of mining machinery and equipment, the problem of dirty coal, unofficial strikes and the shortage of railway wagons.

100. The National Council decided at its second meeting that Divisional Consultative Councils should be set up as soon as possible. By July, 1947, these Councils were established in all Divisions, based on a "model constitution" recommended by the National Council. The Northern Divisional Board found it difficult to distribute membership of the Divisional Council among the three coalfields of Cumberland, Northumberland and Durham. They therefore asked the National Council to approve the setting up of three sub-Divisional Councils. This approval was given subject to review at the end of the year. Divisional Councils consist of 20 members—six appointed by the Divisional Board, six by the N.U.M., six by the National Association of Colliery Managers and two by the National Association of Colliery Overmen, Deputies and Shotfirers. The Chairman of the Divisional Council is the Chairman of the Divisional Board. Some Divisional Councils have appointed committees to discuss particular subjects. In Scotland two standing sub-committees have been set up to discuss production and safety, and health, recruitment, training and welfare. In the Northern Division, each of the three sub-Divisional Councils has set up a general purpose committee, a production committee and a safety and health committee, all of which meet monthly. In the North Western Division, committees have been set up on production and safety, health and welfare; and training, education and recruitment. The South Western Divisional Council has established committees on pneumoconiosis, safety and health, and training, education and recruitment.

101 By the end of 1947 Area Consultative Councils had been set up in only two of the Board's Divisions—West Midlands and South Western. In other Divisions it was felt that for a number of reasons it would be better to delay the setting up of Area Councils. However, the National Consultative Council made it clear that though the establishment of Area Councils might be deferred, they regarded them as an essential part of the consultative scheme to be introduced when practicable.

COLLIERY CONSULTATIVE COMMITTEES

102 The Colliery Consultative Committee is the colliery's "Parish Council". The chairman is the colliery manager. For the rest, the Committee consists of three members appointed by the manager, two of whom must be underground officials; the Board's mining agent and the Area agent of the N.U.M. and the colliery Lodge Secretary of the Union are *ex officio* members, one Deputy is elected by secret ballot, and six other members are also elected by secret ballot—two representing face workers and the other four representing underground haulage workers, contract workers (not employed at the face), surface workers, and tradesmen, respectively. The elected members hold office for

three years, one-third of them retiring each year. The Committee may invite anyone with special knowledge of the matter under discussion to attend the meeting. Specific functions are laid down for the Colliery Committees—for example, they are to consider accident and sickness trends, welfare arrangements, training and education, efficiency of the colliery, future development plans and other matters. The Committees are to watch the weekly output performance of their colliery and suggest ways of improving it. Welfare arrangements covered by the Committee include provision of meals, washing accommodation, sanitation, cycle sheds, safety appliances, first-aid equipment, protective clothing and footwear, laundry and boot-repairing schemes.

THE COLLIERY COMMITTEES IN PRACTICE

103 During the year elections were held and the Committees gradually went to work. Delays occurred in some places, notably in the North Eastern Division, over the representation of Deputies. By the end of the year, however, Consultative Committees were working at most collieries in the country.

104. Many re-organisation schemes have been brought before the Colliery Committees. If the management wish to close a pit or part of a pit which involves the transfer of men from one place of work to another, the whole case is first of all put to the Colliery Consultative Committee. During the year three collieries in South Derbyshire were closed—Thorntree, Bretby and Netherseal. This involved the transfer of men to nearby collieries. That this transfer was achieved without loss of output was mainly due to the work of the Colliery Committees. The Consultative Committee at Waleswood in the North Eastern Division discussed fully the proposal to close the colliery. The Bradford reconstruction scheme in the North Western Division was explained to the men working in the colliery through the Consultative Committee. Detailed explanation of the North Derbyshire concentration scheme involving Williamthorpe, Holmewood and Bonds Main collieries was also given to the Colliery Committees and the scheme was discussed fully. The introduction of the five-day week and the re-assessment of tasks were also discussed by many Colliery Consultative Committees. In the East Midlands Division, for example, in the weeks immediately before the introduction of the five-day week 20 meetings of combined Pit Production Committees were held, at which members of the Divisional Board and the N U M Area officials explained the working of the agreement and the new responsibilities imposed on both management and men. These meetings greatly helped in securing the acceptance of greater daily tasks within the Division. Another important matter discussed by many Colliery Committees is the problem of absenteeism. In the North Eastern Division, habitual absentees are asked to attend the colliery meetings to explain themselves. In the South Eastern Division, the Consultative Committees have suggested the dismissal of habitual absentees. In the East Midlands Division during the year 200 men were dismissed for persistent absenteeism on the advice of the Colliery Committees. Other subjects discussed by these Committees have been the filling of cleaner coal at the face, the letting of N C B-owned houses, and thefts and wilful damage at collieries. At Mains Colliery in the North Western Division the Committee worked out a scheme for the purchase and issue of workmen's personal tools, which has helped to minimise loss of output through shortage of these tools. In Yorkshire, Colliery Committees have organised ambulance facilities and first-aid competitions. At Ansley Hall in Warwickshire the Committee has revived the colliery institute and sports club.

105 These are only a few examples. They are given merely to illustrate the sort of work which has already been done by the Colliery Consultative Committees. It will take time before all these Committees are working well throughout the coalfields. Some Divisions report cases of apathy and lack of

interest in the Committees' work. Often much of the Committees' proceedings consists merely of destructive criticism. It has also been found that many members of these Committees do not yet fully realise that they have no executive powers but are intended to make recommendations to the management. These defects—natural enough in the early stages of the scheme—must be overcome. To improve the understanding of what consultation means, the South Western Division inaugurated a series of Area conferences of members of Colliery Consultative Committees, at which the purpose of the Committees was explained and many suggestions for better arrangements were made. In the North Western Division a week-end school was held at Manchester University in November, 1947, on "The Consultative Machinery in the Mining Industry." By means such as these, by the constant efforts of managers and Union representatives, and above all by the day-to-day operation of the Committees themselves, understanding of the consultative idea will grow, and from this understanding will come a new unity of purpose in the industry.

Staffing Policy

106 At first sight, it might have seemed that the administrative, professional, technical and clerical staffs of the coal industry would be little affected by nationalisation. Most of the staff had worked for salaries and wages and few had participated directly in the profits of the industry; the main incentive to greater efficiency and greater effort was still the prospect of advancement. But that is not the whole story. In fact, nationalisation inevitably brought changes to the working lives of all who earned their living in the industry including those on the management side.

107. In the past there were many kinds of employer: each company paid what it liked or could afford, and it appointed, promoted, or dismissed anyone it pleased. Now there was one employer, the National Coal Board. With their public responsibilities the National Coal Board had to be in the first flight of good employers. But if the Board were, by their nature, precluded from paying their employees too little, they were equally prevented from favouring individuals to the detriment of their fellows or at the public's expense. They had to be a responsible employer and a just employer.

108 For those engaged in management there were fresh opportunities for the exercise of individual talents in organising and planning the development of the coalfields on a scale not possible under private ownership. For the few there were posts at Divisional and Area Headquarters and at National Headquarters of more scope and responsibility than the old companies could have provided, and for the majority there was the possibility of advancement to the new posts. But if under the Board all the staff were put in a position to compete, by their zeal and their efforts, for new posts of responsibility, there was no longer the same chance as there had been before of personal enrichment. Some companies had paid a selected few of their senior officials very high salaries, so high that the Board, with their public responsibilities, could not offer them in the future.

109. Some colliery companies had superannuation schemes for their staff, but not all. In accordance with Regulations made by the Minister under the Coal Industry Nationalisation Act, the Board introduced a superannuation scheme for all members of the staff. The Board's contributions amounted to 8 per cent of salary and represented an increase in the emoluments of those members of the staff who formerly belonged to no superannuation scheme or belonged to one with benefits less favourable than the Board's scheme. The cost to the Board of providing for superannuation is about 4d. per ton of coal sold.

110. If public service gives greater scope, it also involves greater responsibilities. This means restraints. Thus, it is no longer proper for any official of the industry, however senior, to exercise any kind of patronage. As a public servant it is not only necessary that he should act fairly, he must be able to show under a searching scrutiny that he has done so. New qualities are required in the higher reaches of management, and a new outlook. The Board have a statutory duty to make the industry pay its way over an average of good and bad years. To this extent they operate as a business on business lines. Yet the Board's business is different from any commercial enterprise, however large, because of their obligation as a public body to serve the public interest. The Board's senior officials will need every ounce of business acumen they possess, if operating costs are to be pruned with vigour, if reorganisation of the coalfields is to yield maximum economies, and if the British coal industry is to make its way in the export markets of the world. They will also need other qualities. They must be devoted to the public interest, they must be impartial, they must be guided by broad considerations of national policy, they must be able and willing to shoulder responsibilities more onerous than those normally met in the commercial world, and they must be capable of rapid and decisive action under conditions of stress.

SALARIES AND WAGES

111. If, with no inheritance from the past, the Board had been preparing to operate a new industry, starting to work coal for the first time, they would have had little difficulty in devising a logical system of paying their staff. They would have assessed the numbers of posts required at different levels of responsibility and fixed salaries comparable with those which were being paid in other industries for posts of similar responsibility, taking account of the additional opportunities which public service confers. They would have had a rigorous system for selecting new entrants to ensure that everyone had a fair chance of competing and to ensure that the new public service was staffed with the best material. They would have ensured that the prospects of a young man would satisfy his ambition for a career and provide an incentive to greater efficiency and greater effort. They would no doubt have borne in mind that in a large organisation, it is hard to establish the relative worth of the hundreds or even thousands of members of the staff who fill posts of comparable responsibility at widely separated points. The Board would find it even more difficult, as a public body, to justify different salaries paid to people doing similar work. It would probably have been necessary, therefore, for the Board, following the example of many large commercial organisations, as well as of the Crown Services, to establish salary scales, varying from locality to locality, for groups of posts of about the same responsibility, with provision for the grant of annual increments to reward efficiency. Annual increments would be withheld from men and women who were not fully efficient, but otherwise there would be no differentiation as between man and man and between woman and woman who held the same kind of post. Outstanding efficiency would result in promotion to a post of higher responsibility carrying better remuneration. Inefficiency, if not serious enough to warrant dismissal, might result in the offer of a post of less responsibility and carrying a lower salary.

112. The Board did not, however, start with a clean slate. The systems of remuneration of the colliery companies were many and various. Often employees drew part of their emoluments in kind as perquisites—for example, free house, free coal, free gardener. A few participated directly in the profits of the company or were accustomed to draw bonuses when the company had had a good year's trading. There were the widest variations in the level of remuneration paid by different companies for getting the same job done.

113. The Board, by virtue of the Coal Industry Nationalisation Act, inherited the contracts of service of all the employees in the industry, and though they could vary the remuneration of some of the employees by the simple process of giving notice to terminate a contract of service and replacing it by a new one, there were a minority—a substantial minority—who held long-term service agreements which could not be brought immediately to an end without incurring compensation for breach of contract. Nevertheless the Board brought many of these contracts to an end and 327 persons were declared “redundant”. Examples of their emoluments are as follows—

	Salary	Perquisites (Mainly tax free)
Mr A . . .	£7,259	£948
Mr B . . .	£8,788	Nil
Mr. C. . .	£8,000	£2,550
Mr. D. . .	£5,800	£1,300
Mr. E. . .	£5,750	£850
Mr. F . . .	£5,000	£755

114 During 1947, claims for damages for breach of contract were settled by lump-sum payments aggregating £109,646. Other claims were under discussion at the end of the year. Apart from damages for breach of contract “redundant” persons with or without the protection of long contracts may later have claims for compensation arising out of a scheme to be made under Regulations and to be approved by the Minister. In 1947, the scheme was not yet made.

115. To men whom the Board wished to retain in their service, they were often obliged to pay high salaries under agreements which they had inherited from their predecessors. There were instances in which the Board were compelled to pay higher remuneration than in their view will normally be necessary in the future. Some key men on the engineering side made it a condition of remaining in the Board's service that their existing emoluments, though not secured by any long-term agreement, should be preserved. They argued that they were being asked to carry a greater responsibility than before nationalisation and it would not be right to cut their remuneration. Often they were in a position to get employment with their old companies, at their existing—or higher—salaries. They would help with the companies' claims to compensation and the winding up of their affairs. For a man near the age of retirement, this would be an attractive alternative to the stress of heavy responsibility in a new environment under the Board. For a younger man, too, this alternative prospect might look attractive, particularly if there was a chance of receiving a substantial gratuity from the company when it was finally wound up. Thus, in a few instances the Board were obliged to continue salaries formerly paid by colliery companies, in excess of £4,000 or £5,000 a year—the normal ceiling for senior production appointments (see Appendix V). This was done in order either to comply with the law or to retain the services of key men. The highest of these salaries was £7,500 a year, with perquisites in addition.

116. It was not only in the highest reaches of the management that the Board experienced difficulty because of disparities in rates of remuneration. There might be hardship if a man who had entered into commitments had a sudden drop in salary. Moreover the companies that paid most had the pick of the market and presumably were often employing the better men.

117 With these facts in mind the existing emoluments of all people taken over were continued until the Divisional Boards had looked at each case. Then, having established what they regarded as a fair rate for the job, they often allowed those who had been receiving more than this to get the balance, or part of the balance in future as a "personal allowance." These personal allowances were by no means granted automatically, the grant depended on the capabilities of the man and the task he was called upon to perform. They were paid to the man, and not for the job. They will eventually disappear.

118 Staff who had been poorly paid in the past claimed that as there was now a single employer in the coal industry they should not receive worse treatment than anyone else. Where it was possible to lay down a standard rate of remuneration for the job, Divisional Boards were accordingly authorised to increase the rate of pay up to this standard, immediately or by stages, but whether this was done and the speed with which it was done again depended on the assessment of the worth of the individual by the Divisional Board. The Agreements with the Unions representing clerks provided that all whose salaries were below the new scales should have them raised at once (*See* paragraph 93.)

119. It was not possible to fix standard scales of remuneration for every kind of post. For colliery managers and other production appointments the Board were bound to a large extent by past practices and customs in the various coalfields. It did not seem practicable, at any rate at the outset, to attach incremental salary scales to such posts. One colliery manager might be in charge of 50 men, another of several thousand. And, apart from the question of numbers of men, the managerial and technical problems of one pit might be much more difficult than those of another. However, though the National Coal Board realised they could not fix salary scales, they could fix a *salary range* (*see* Appendix V) for such posts as those of colliery manager, leaving it to the discretion of the Divisional Board to place the manager at a proper point in the range, according to his experience and capacity and the technical and managerial difficulties of the post.

120 Grade structures with salary scales were drawn up not only for clerical staff but also for the Board's administrative staff and those serving in the Board's Finance, Scientific and Legal Departments throughout the country. (*See* Appendix V) This could be done because most of the Board's administrative staff were serving at new formations at National, Divisional and Area Headquarters, while the Finance, Scientific and Legal Departments were, to a considerable extent, new services, for many of the colliery companies in the past had either not undertaken the functions which it fell to these staffs to carry out or they had made use of the services of outside consultants in order to discharge them. Other grade structures were in course of preparation during 1947.

PERQUISITES

121 By long tradition many coal industry staffs, like the mineworkers themselves, had been remunerated partly in cash and partly in the form of perquisites. One of these perquisites was the grant of coal, free or at specially favourable prices, to staff employed in and about collieries. The staff and the mineworkers regarded this perquisite as a valued privilege based on a time-honoured custom of the industry. Their special position had been recognised in the Coal Distribution Order 1943 (S R & O. 1943, No. 1138), which restricts the supply of coal for domestic consumption. The Order provided in effect that coal in excess of the permitted quantities could continue to be supplied to people employed in or about collieries if they had received it in the past as a perquisite of their employment.

122. At a time when a great need was felt for incentives to produce more coal, the Board would not have been justified in seeking to withhold the grant of coal at free or reduced prices from the mineworkers who enjoyed this perquisite. It would have been difficult to distinguish between mineworkers and other colliery employees, including, for example, clerks, who lived as neighbours of the mineworkers, as often as not in the same mining village. Moreover, the Board inherited the contracts of service of their employees with the former colliery companies and if the grant of a quantity of coal was a written or unwritten condition of service, the Board were obliged to continue it unless and until the contract was varied by agreement.

123. So the Board continued the privilege for most of those who had had it in the past, from Agents in charge of several pits and colliery managers, to mineworkers and all other colliery employees. By the same token, the Agents and others who accepted appointments under the Board to serve, for example, as Divisional Production Directors or as Area General Managers, also continue to receive a concessionary grant of coal.

124. Though the Board agreed that many of those in receipt of the privilege should thus continue to enjoy it, they felt that it was necessary to prevent any extension. While in normal times there might be something to be said for remunerating employees partly in cash and partly in the form of a generous allowance of coal, and the case can be argued both ways, it would not have been justifiable to extend the grant of coal in excess of permitted quantities so long as the general public were restricted in the quantities they were allowed to consume. Accordingly, the Board decided that staffs at the new formations which they had created—Divisional and Area Headquarters—should not be granted concessionary coal, irrespective of whether they had received it in the past. The only exception was in favour of certain engineers at Divisions and Areas.

125. Coal was not the only perquisite granted to officials of colliery companies. It was customary for colliery managers and others to be granted a free house, often with the use of a gardener and sometimes with free electricity, gas and water. There was some reason for the system, since often a colliery manager is obliged to live near his job in a colliery house. In many cases where a man had enjoyed perquisites of this sort in the past he was allowed to retain them. So long as he continued to draw the same salary the perquisites were granted as well. If he was put on to a new rate of remuneration which the Board regarded as being a fair rate for the job he was doing, then if he retained the perquisites his cash emoluments were reduced.

RECRUITMENT AND PROMOTION

126. The Board hope that in the course of time most of the senior posts will be filled by people who started in junior positions in the industry, but they must also make provision for accepting into their service candidates from among those who stay on at school beyond the normal leaving age or who go to a University. They wish to select, irrespective of their educational origins, young people who show signs of promise and train them for higher office, and it is an object of their policy to ensure that the highest posts are accessible to those who started in the humblest positions in the industry. This is in fact a long-term policy. The new formations created by the Board at Divisions and Areas were staffed in large part by men in the industry whose contracts of service were transferred to the Board by the Coal Industry Nationalisation Act. There was not time during 1947 to settle methods of recruitment and promotion throughout the industry, but everything possible was done to ensure a fair field of selection.

NUMBERS

127. Another problem was to ensure that the industry did not employ more people in the management of its affairs than was strictly necessary. Reasons of business prudence on the one hand, and the nation's need to conserve its limited resources of manpower on the other, alike impose on the Board the duty of keeping down the numbers of staff.

128. In theory, perhaps, it would be possible to lay down from the centre the numbers of staffs in the various grades that should be employed in the industry, and these numbers could bear a fixed relation to the numbers of the directly productive workers. In practice, conditions vary so much from colliery to colliery as to make this impossible except after many years' experience. Moreover, the Board have sought to devolve as much responsibility as possible from the centre on to Divisional Boards and the Area Managements, and not only responsibility for policy, but responsibility for 'finance' which in any concern operating on commercial lines is inseparable from policy. It would weaken the sense of financial responsibility of Divisional Boards and of Area General Managers if they were not held responsible for economy in staffing.

129. The National Board accordingly approved a pattern for the senior appointments at Divisional Headquarters and Area Headquarters and left the Divisional Boards free to complete the staffing arrangements in their Divisions. It may be that in the long run something like standard complements will emerge throughout the industry by a natural process of development.

130. Sometimes, it is said that large staffs at any Headquarters are by their nature uneconomical, and there is indeed a tendency for Headquarters staffs to grow, a tendency which the Board must keep in check. But additions to a Headquarters' staff need not be uneconomical. Whenever it is possible to replace eight men, one in each Division (or 48 men, one in each Area) doing the same sort of work, by one man at the National Headquarters, there is an immediate economy, though there may be equally good reasons for not making the change. Scientific research is one example of a service which the Board found it more economical to organise centrally. Other common services were similarly carried out for the industry as a whole, such as expert guidance on engineering and other specialised subjects.

131. At the end of 1947 there were 34,500 administrative and non-industrial workers in the coal mining industry, including ancillary undertakings which vested in the Board. This total includes the staff at the Board's Headquarters in London, at Divisional and Area Headquarters, and at colliery offices, and also those administering other parts of the Board's organisation, such as Training Centres. The following table shows the numbers and total salaries of staff employed at different administrative "levels". These figures include clerks and typists.

ADMINISTRATIVE AND NON-INDUSTRIAL STAFF AT 31ST DECEMBER, 1947

	Numbers	Approximate Annual Salaries
H Q Office	1,151	£ 664,439
Other national activities	593*	252,153
Divisional Headquarters	3,004	1,575,357
Areas	6,074	2,932,652
Total H Q Divisions and Areas	10,822	5,424,601
Collieries	23,713	9,065,909
Total	34,535	14,490,510

* Includes 425 staff employed at Training Centres in coalfields

The total of 34,535 cannot be compared with the figure of 20,000 administrative and clerical staff given in the Ministry of Fuel and Power's Statistical Digest for 1945. The latter figure related to staff at colliery offices and to people employed at Group or H.Q. offices of the larger companies. It did not include all the staff of the industry, nor did it include the staff of the ancillary undertakings taken over by the Board. The comparable figure for the staff employed in the industry when the Board took it over on 1st January, 1947, was 30,123. During the year, therefore, the industry's staff increased by 4,412. Total salaries increased in the same proportion. The table below gives details of the increase in numbers. The numbers shown as employed in the industry at the end of 1946 (few of them as yet employed by the Board) have been grouped to allow comparison with the numbers employed by Headquarters and Divisions of the N C B at the end of 1947.

INCREASE IN ADMINISTRATIVE AND NON-INDUSTRIAL STAFF DURING 1947

	End of 1946	End of 1947	Increase
Headquarters	707*	1,151	444
Other national activities	555	593	38
Scotland	3,256	3,619	363
Northern	5,097	6,013	916
North Western	2,829	3,146	317
North Eastern	5,754	6,566	812
East Midlands	4,232	4,969	737
West Midlands	2,559	2,853	294
South Western	4,869	5,341	472
South Eastern	265	284	19
Total	30,123	34,535	4,412

* Most of the staff shown against "Headquarters" at the end of 1946 were performing central functions for the industry before nationalisation. Only about half of this staff had entered the Board's employment before the vesting date.

By the beginning of 1947, however, the Board had already taken on 607 employees at Headquarters and in the Divisions. Of these some 387 came from outside the industry, and most of these may fairly be regarded as a net addition to the figure of 4,412.

132 Much of this new staff has been made necessary by the new tasks placed on the industry since nationalisation, such as the development of scientific, welfare and education services, and the recruitment and training of labour (including the training of foreign labour). In addition, the process of transferring the industry from private to public ownership has itself caused much administrative and clerical work—such as is involved in the registration of assets, exercise of options, and the reviewing of contracts and redundancy problems. Some of the staff of the industry during the year had also to assist their old companies in preparing compensation claims.

133. At the same time, the Board have taken on much work previously done by people not included in the pre-nationalisation staff of 30,000. At the end of 1946 there were more than 1,000 Chairmen and Directors of colliery companies giving part of their time to running the industry (apart from managing directors or directors with managerial functions). The work done by these directors is now done by the Board's staff. Before the vesting date it was also common

practice for colliery concerns to engage the services of consultants or specialist advisers, either by a retainer or simply as they were needed. Among such experts were mining engineers, solicitors, veterinary surgeons, doctors, accountants, architects, surveyors, chemists, dust-suppression and hill-fire experts, and many others. It has been the Board's policy wherever possible to do all this work through their own staff. Similarly the Board have ended some sales agencies, and now market the coal themselves. They also decided not to insure with insurance companies except against a few risks involving statutory inspections. Most insurance policies held by colliery companies which the Board inherited under the Nationalisation Act have therefore been allowed to lapse, and the Board now do their own insurance work. The Board's legal staff acts in place of the many firms of solicitors who, in the past, acted for colliery companies. Most of the work previously done for the industry by private firms of accountants has been taken over by the Finance Department of the Board. The Board have also taken over many independent organisations which were not formerly reckoned to be within the industry. Examples are the Nuneaton Staff College, Rescue Stations, the Sheffield Mines Mechanisation Centre, the Coal Survey, Research Laboratories and some carbonisation activities.

134. There were also particular reasons why more staff were needed during 1947. The introduction of the Five Day Week, the extension of hours, and the increase in the minimum wage all put an added burden of work on the wages staff of collieries. In the year, the number of mineworkers increased by 26,000—or nearly 4 per cent., and more administrative and clerical workers were needed to administer the extra labour.

Welfare

135. As a "good employer" the Board must concern themselves with more than wages and conditions of employment. The following paragraphs deal with other benefits, some of them material, some non-material.

RELATIONS WITH MINERS' WELFARE COMMISSION

136. In providing welfare services—pithead baths, canteens, recreation schemes, community centres, educational and cultural activities, rehabilitation centres, convalescent homes and hospital schemes—much had been done in the past by the Miners' Welfare Commission, a statutory body operating under the aegis of the Minister of Fuel and Power. This was in addition to welfare services provided by some colliery companies. The Commission's revenues had been derived thus—

- (a) from the colliery owners 1d. on every ton of saleable coal produced,
- (b) from the owners of coal royalties (in recent years the Coal Commission) 1s. for every £1 of royalty.

137. The yield from these contributions was about £850,000 a year. The Commission was composed of representatives of the National Union of Mineworkers, the colliery owners and the royalty owners, as well as independent public men, and all were appointed by the Minister of Fuel and Power.

138. The Coal Industry Nationalisation Act of 1946 left the Miners' Welfare Commission in being, but authorised it to act as the agent of the Board. Representatives of the colliery owners and the royalty owners were replaced by representatives of the Board, and to ensure collaboration between the Board and the Commission, the Minister of Fuel and Power appointed the Member of the Board responsible for Welfare matters (initially Lord Citrine and later Sir Joseph Hallsworth) to be Chairman of the Commission. The Commission

operated through 25 District Welfare Committees composed roughly on the same representative basis as the Commission itself. The National Coal Board have inherited the liabilities of their predecessors to provide the statutory contributions described above. The Board decided that they would supplement their statutory contributions by an amount which at the outset would be another 1d. on each ton of saleable coal produced

139 The Board, unlike the Commission, are empowered to make arrangements for the welfare of all their employees including those not employed in coal-mining, for example, coke-oven workers. The Commission on the other hand have wider powers than the Board for making welfare arrangements for miners' dependants. To avoid wasteful duplication of staffs, discussions were started between the Board, the Miners' Welfare Commission, and the Unions concerned with a view to integrating the welfare activities of the Board and the Commission. An agreed scheme was prepared and submitted to the Minister of Fuel and Power, who announced his approval in the House of Commons on 4th December, 1947. The scheme was to take effect from 1st January, 1948

140. The essence of the scheme is the creation of a joint authority in London, to be known as the National Miners' Welfare Joint Council, consisting of all the members of the Miners' Welfare Commission plus two representatives of the Board, with an executive organisation serving both bodies—housed, staffed and administered by the Board

141. The National Miners' Welfare Joint Council will be supported by Joint Welfare Committees in Divisions and Areas which will supplant the District Welfare Committees. The new Welfare Committees will have representatives of the Board and the National Union of Mineworkers and also in some cases of the British Association of Colliery Management and the National Association of Colliery Overmen, Deputies and Shotfirers. Thus, like the Colliery Consultative Councils and the Divisional Consultative Councils which will collaborate with them, the Welfare Committees will fully represent the interests of management and work-people

142. During 1947—before the new joint organisation was set up—the National Coal Board and the Divisional Coal Boards kept in close touch with the Miners' Welfare Commission. A member of the Commission's staff was seconded to the Board's Headquarters on 1st January, 1947, and many District Welfare Officers of the Miners' Welfare Commission were seconded to serve as the Board's Welfare Officers in the coalfields

PITHEAD BATHS

143. One of the main functions of the Miners' Welfare Commission has been to provide pithead baths. The building of new baths had to be suspended during the war and was only resumed in 1945. Progress since has been slow owing to shortages of materials and labour. Since the war seven pithead baths have been completed, six of them in 1947. Work was in progress at 27 other sites at the end of the year

144 At present there are pithead baths for only half the miners in Great Britain. Before the war, because of the limited funds available, the Miners' Welfare Commission usually only built baths at the larger collieries with a probable life of 15 years or more. In a few cases, however, small baths were built by the owners, especially in Scotland. It is the aim of the Board and the Commission to provide baths for miners at all new collieries, and at all existing collieries with a reasonable span of life. In 1947 a provisional nine-year construction plan was drawn up involving capital expenditure of nearly

£20 million During 1948 it is hoped, if materials can be made available, to start building baths at 120 collieries At the smaller collieries employing less than 250 men standardised bath units will be constructed

145 In the past the pithead baths built by the Miners' Welfare Commission were handed over to charitable trusts, the trustees being appointed in equal proportions by the colliery owners and the workmen As and when vacancies are caused by the death, disqualification or retirement of trustees appointed by the owners, representatives of the Divisional Coal Boards will be nominated to fill them. New baths will be vested in the National Coal Board

146 In the past the cost of maintaining pithead baths was normally met from equal contributions by owners and workmen In April 1947 the Board undertook responsibility for the full cost of maintenance, except for soap and towels, and thus relieved mineworkers of payments of from 2d. to 1s a week The cost to the Board is at present about £750,000 a year which will rise considerably when pithead baths have been installed throughout the coalfields.

147. In constructing new collieries and reconstructing old ones, pithead baths, together with other welfare buildings, such as canteens, will be made an integral part of the colliery.

CANTEENS

148. There are 937 colliery canteens covering 97 per cent. of the workers in the industry Many canteens maintain a 24-hour service. Often one man will take more than one meal per shift—a packed meal and a main meal.

149 Some of the canteens were erected by the Miners' Welfare Commission and some by the colliery owners In either case, the capital finance was normally provided by the Commission Where, as frequently occurs, the canteen adjoins the pithead baths, property in the canteen and the baths vests in trustees, appointed in equal proportion by the colliery owners and the workmen (*see* paragraph 145 above) The canteens are in every instance managed by a committee composed of equal numbers of representatives of the colliery management and the workmen The trustees of trustee-owned canteens are normally *ex officio* members of the canteen management committee.

150 In 1946 the Ministry of Fuel and Power had set up a catering organisation which took over from the Ministry of Food the duties of improving colliery canteens by providing money and advice. This responsibility was transferred to the National Coal Board, but until June 1947 the catering organisation of the Ministry of Fuel and Power continued to function as agents of the Board In June 1947 the staff and the functions passed to the Board Many of the canteens had been brought into existence under war-time conditions Austerity standards had been adopted, both in structure and equipment; and by the beginning of 1947 there was an accumulation of defects to be remedied.

151 The Board's view was that efficiency would best be served if canteen committees were made responsible for paying their own way, but the capital improvements needed were often beyond the resources of these committees Accordingly the Board accepted responsibility for "capital" improvements, but left it to the canteen committees to meet the cost of deferred repairs as well as current maintenance costs

152 To improve the standards of canteen management, routine inspections by the Board's catering officers attached to Divisional Boards were arranged. Whenever a canteen was providing poor meals and poor service, or management was inefficient, the management committee were persuaded to ask for the whole-time service of one of the catering officers for a week or more. During this

period the canteen was reorganised, special attention being paid to quality and variety of meals, hygiene, staff organisation and training, record keeping, stores organisation and the control of income and expenditure

153 The annual turnover of the canteens is of the order of £7 million (including the sale of cigarettes and tobacco) Most canteens cover their costs

EDUCATION

154 The first educational need of the industry is to equip each man to do his work as efficiently as possible, whether he is, say, a Divisional Planning Engineer or the newest apprentice to the colliery workshop, and to provide opportunities for as many as possible to acquire technical knowledge and skill qualifying them for the most highly skilled and the most highly responsible posts in the industry

155. During 1947 Divisional Boards were encouraged to stimulate interest in mining education, and to make their own arrangements with educational authorities and institutions

156. The arrangements, which varied somewhat from coalfield to coalfield, included the following:—

- (i) practical training at collieries of full-time mining students at Universities and technical colleges during vacations,
- (ii) part-time courses during working time for selected mining students,
- (iii) encouragement of attendance at evening continuation classes in mining, surveying, mechanical engineering and electrical engineering,
- (iv) refresher courses for colliery managers at technical colleges,
- (v) release, with pay, for employees to attend intensive full-time short courses, for example at the Royal Technical College, Glasgow, designed to enable young men of promise to qualify sooner as mining officials.

157 Before nationalisation a few colliery companies had schemes for the systematic training of apprentices to become maintenance engineers, fitters and electricians. With the progress of mechanisation there will be a large demand in the industry for skilled men of all kinds. So while continuing the apprenticeship schemes which were already running, the Board made plans in 1947, which will mature in later years, for an apprenticeship scheme covering the industry as a whole, involving the recruitment and training of 2,000 selected boys annually. On completion of their apprenticeship, the outstanding boys will receive opportunities, including University Scholarships, to qualify for higher engineering posts. Similarly scholarships will be offered to boys leaving school at a later age.

158. In July, August and September of 1947 a small international experiment was initiated by the Board. Men who had recently graduated in mining at the British Universities were enabled to visit the coalfields of Czechoslovakia, France, Germany and Holland. The National Coal Board accepted mining students from those countries in exchange, attached them to collieries, and arranged visits to other collieries as well as to engineering works and places of general interest. Again, senior technical staff of the British coal industry, including Divisional Planning Engineers, Area General Managers and Agents, were enabled to visit continental coalfields and study the latest developments in continental technique

159. The Board are not only interested in "technical" education. They are also concerned with other sorts—in particular with "industrial education", that is to give every person working in the industry as clear a view as possible of his work in relation to that of other staff, and to demonstrate how the interests of the employees, both as citizens and workers, are identified with those of the

Board. In all large organisations there is a danger that the rank and file of the workers will feel that the authorities who govern their destiny are remote and unsympathetic. To counter this it has been the aim of the Board first to give as much latitude as possible to the initiative of local managements, and secondly, to associate workmen with the local management through the medium of consultative machinery. But even the proceedings of Consultative Committees dealing with the affairs of whole collieries may seem unreal and remote to the man working at a particular coal face in a particular district of a large mine. It is not sufficient to bring the conclusions of Consultative Committees to the notice of all men at a colliery. Everyone must be encouraged to take a continuous interest in the proceedings of the Committees, to see that his own views are taken fully into account by the workmen's representatives and loyally to accept recommendations agreed to in his name and on his behalf. During 1947 Divisional and Area Conferences were held and many suggestions for improving the working of consultative machinery were made and debated. To make consultation a living force is an educational task, begun in 1947 and continuing.

160. Publicity, too, can help not only to remove any sense of isolation which the mining communities may still feel, but also to bridge the distance between the collier working below ground and the members of the National Coal Board responsible for the industry's policies in London. In May, a coal industry magazine, "Coal", was launched, at first with the assistance of the Central Office of Information. The price was 4d. a copy and the circulation soon reached 100,000 copies a month. The circulation could not be increased beyond this because of the paper shortage. The magazine was designed to give news of what is going on in the industry and in other industries dependent on coal. At about the same time a monthly newsreel was produced with roughly the same idea—to show the coal industry to the coal industry. The newsreel, now called "Mining Review", is distributed through commercial channels to cinemas in the coalfields. The newsreel, like "Coal", was originally produced for the Board by the Central Office of Information, but now the Board produce it themselves, using an outside contractor. On 11th September, 1947, the Prime Minister opened the "Miner Comes to Town" Exhibition in London. This Exhibition was staged by the Government in collaboration with the National Coal Board. It was seen by more than 160,000 people. A number of miners came to London and acted as guides to the model underground workings which formed part of the Exhibition. The visiting miners received generous hospitality at the hands of many Londoners and they spoke at many meetings. When the Exhibition was disbanded exhibits illustrating the problems of the industry and the way in which the Board would attempt to solve them were displayed in the provinces where miners could come to see them.

161. Publicity is no substitute for personal contacts. The Chairmen and Members of Divisional Boards have made it their business to go about the coalfields talking to the men personally, explaining the Board's problems and hearing from the men about theirs. Staff conferences were organised to bring together members of the Board's staff working in different places and in different jobs but as colleagues to a common end. In particular, a summer school was held during the second part of August at Cambridge. Approximately 300 persons, drawn from all Divisions and Headquarters, met to discuss the problems of the industry. Addresses were given by Mr. Gatskell, Mr. Will Lawther, Mr. Arthur Horner and Sir Norman Kipping as well as by Members of the National Coal Board. Those who attended the conference were able, when they got back to their coalfields, to pass on to their fellows the understanding they had gained of the policies and purposes of the industry. A similar school is to be held in 1948 at Oxford.

162 There remain liberal education and cultural activities which are apart from the immediate work of the industry. To provide them is not mainly or solely the responsibility of the Board but is largely the responsibility of Education Authorities and other outside agencies. In this field the Miners' Welfare Commission had in the past played an important part in providing recreational facilities and community centres, in stimulating and helping to organise classes and courses for leaders of boys' clubs, art exhibitions, dramatic societies, colliery choirs and colliery bands. During 1947 the National Coal Board were fully associated with the Miners' Welfare Commission in fostering cultural activities, but taking the coalfields as a whole the picture is one of haphazard development, and it will be the task of the new Miners' Joint Welfare Council and the Local Welfare Committees described above to fill the gaps as soon as they can. The National Coal Board in 1947 organised in London a display of miners' painting and handicraft. About 300 works were exhibited. About 100 of these were selected for a touring exhibition to be shown at the leading Municipal Art Galleries. The London Exhibition was visited by about 15,000 people.

CHAPTER IV PRODUCING THE COAL

The Production Drive

163 In the early months of the year colliery managers had been instructed to intensify their efforts to increase output. They were to use manpower where it could produce the greatest output, sometimes arranging for men to do bigger daily tasks, and sometimes transferring men from one sort of job to another. There was to be more machinery at the coal face and on the haulages, and "oncost" workers were to be "upgraded" so as to get more men working at the coal face.

164. Managers could rely on the Divisional Boards and the Area Managements as they came into being to give them guidance and support, particularly by getting supplies and equipment and finding additional manpower. Divisional Boards would close unproductive pits and transfer the men to pits where their output per man-shift would be higher. Success depended on securing co-operation between management and men.

165 The task varied from coalfield to coalfield. In the East Midlands Division, which comprised the most highly productive coalfields in Great Britain, and where there was a long tradition of close co-operation between management and mine-workers, it was a question of deciding which of the purely technical measures open to the management would give the quickest results. The layout of most of the collieries was good. In some other Divisions the physical condition of many of the collieries was poor, and the degree of co-operation between management and men varied.

166 On completing their survey of the coalfields for which they were responsible, the West Midlands Divisional Board found that more than half of the collieries needed immediate attention. At many something had to be done at once if production was not to fall. Many were badly planned and badly laid out and lacked reserve faces which could be brought into production as existing faces were worked out. Much of the equipment was worn out and arrangements for riding men to the face, if they existed at all, were often poor. Steam raising and electrical plant was found to need extensive overhaul and replacement.

167 In the South Western Division—and particularly in the anthracite coalfield—many of the collieries were old and had a low output per man-shift. Most of the easily worked seams had been exhausted. Many of the pits had not been planned originally for mechanical coal-getting, power supply,

haulage, ventilation and coal preparation plant were inadequate. In large areas of South Wales mechanisation was in its infancy, and concentration of resources had been scarcely attempted. In those areas it was necessary for the Divisional Board to arrange for the training of both officials and workmen in the whole technique of concentrated machine mining—a slow process.

168. In the North Western Division the Divisional Board found that urgent and drastic changes would have to be made at collieries in three of the Division's five Areas, including the North Wales Area. Mining standards varied from good to bad. At a number of collieries the standard of safety and conditions underground were far below that which the Divisional Board regarded as the minimum, and there had not been sufficient development to allow for an immediate drive for increased production.

169. In the North Eastern Division, where mining standards had always been regarded as high, the Divisional Board found the conditions in many pits discouraging and realised that some of them would have to be re-organised in the interests of safety as well as production.

170. Taking the coalfields as a whole, many collieries came over to the Board in first-class condition. Many others were in poor shape, and not a few in a pitiable condition. The war-time drive for production in the face of shortages of manpower and materials was partly responsible for this state of affairs. The financial weakness of a number of companies which, had it not been for the war-time need for production, would have closed down, was another reason. So was the shortage of highly skilled mining engineers.

171. Despite the varying conditions in the coalfields, there was room in each for the application of all the short-term techniques, either individually or in combination. In every coalfield it was a case of installing more face machinery and of improving haulages by substituting conveyors or locomotives for the older "endless rope" tub haulages, of opening new coal faces; upgrading labour to the face, taking in more men; and concentrating machinery and manpower on the most productive seams.

172. During the year approximately 550 short-term projects were begun, and about 340 of them were completed. In carrying them out nearly 1,500 conveyors were installed in the mines during the year, and 32 locomotives were put to work underground. In this way the number of conveyors installed was increased by 16 per cent, and the number of locomotives at work by 55 per cent.

173. Where machinery was installed to replace the hand-getting of coal it meant the training on the spot of men who had all their lives worked the coal by hand. Wage contracts had to be altered by negotiation to bring payments into line with the system of mechanical coal-getting.

174. Only a few pits were closed down during the year. As the emphasis was on maximum production at once rather than on more efficient production later, the Board could only afford to close pits when they could be sure of immediately transferring most of the men to more productive work at other collieries. Seventeen pits and two drift mines were closed during the year, involving 2,680 men, of whom 2,136 were transferred to other collieries. One of the pits which was closed, Dunston Garesfield in Durham, employed 349 men, of whom 346 were placed at other collieries.

175. Most of the additional machinery introduced at the coal face was of the conventional type—that is coal cutters and face conveyors, involving the filling of the coal on to the conveyor by hand. However, the year saw an increase in the use of more advanced types of machinery, notably power loaders which mechanise the filling operation, and cutter-loaders which perform the operation both of cutting and filling the coal. For many years the East

Midlands Division has been ahead of the other coalfields in mechanisation mainly because geological conditions immediately suitable for the introduction of loading and cutter-loading machinery are more common in that Division than in others. In the Division 2.6 million tons, or 7.5 per cent. of the Division's output in 1947, was power-loaded. Twenty of the thirty Meco-Moore cutter-loaders which were at work in the country as a whole at the end of 1947 were operating in the East Midlands Division.

176. In many respects these cutter-loaders are still in the development stage. It is difficult to find the right conditions for their operation. The type most generally in use during the year has been that capable of operating successfully only in thick seams. The newer universal type which can be operated in thin seams has been coming forward in recent months and is being tried out. The operation of cutter-loaders has sometimes been hampered and even prevented by difficulties over wages.

177. The Board estimate that as a result of the purely technical measures, that is introduction of machinery and reorganisation of pits, there was an increase in coal production of 3.5 million tons during 1947. The remainder of the increase in the total deep-mined production of 6.3 million tons must be attributed to better efforts and attendance on the part of the men, and to the increase in the total labour force.

178. Production could not have been increased, however, if the collieries had not been properly supplied with the many and varied items of mining stores, equipment and machines. Apart from specialised items of mining machinery, most of the industry's supplies are drawn from the general run of firms in the mechanical and electrical industries. Many consumers had, therefore, been competing with coalmining for important items at a time when materials, particularly steel, were scarce. Manufacturers were quoting long delivery periods. Delays in delivery might slow up the drive for more production. Exhaustion of stocks in the meantime would mean a loss in production. Stocks of consumable supplies, particularly of pit timber, steel arches and rails, and conveyor belting were most unevenly distributed when the collieries vested in the Board. Where there had been centralised purchasing and stores control by the colliery companies, stocks were good. At many collieries the primitiveness of the store-keeping methods had resulted in shortages and unbalanced stocks. The unevenness with which supplies were distributed was difficult to remedy during the early months when the Board's supplies organisation was still being built up.

179. The Board decided that most of the purchasing should be done from the Area offices by a specialist staff knowing the particular requirements of the collieries. The Divisional and Headquarters organisation supervised this routine purchasing, to see that the Areas did not compete against each other for scarce items, and allocated controlled materials to Areas. They also negotiated contracts for bulk supplies of standardised equipment and stores, leaving it to the Areas to draw on these supplies by ordering their requirements from the manufacturers direct. As the Area and Divisional supplies staffs came into being they gradually reduced the unevenness in the distribution of stocks. Steel, timber and other stores were transferred from collieries which were relatively well off to those where output was threatened. With the co-operation of the manufacturers, order books were revised to give priority to the collieries in the greatest need. This was the most urgent task. The next was to get future requirements put on order, and these orders spread among the manufacturers so as to get the quickest deliveries.

180. It was mentioned in Chapter I that the Ministry of Supply set up a special Directorate to make effective the priority accorded to the Board's needs. At that time the Board's supplies organisation was far from complete. There

had been neither the time nor the staff to assemble all the basic information on which the Board and the Ministry could frame detailed programmes. Many items could not be "programmed" because of the large number of specifications, each of which catered for some peculiarity of local mining conditions (for example, there are several thousand specifications for mine tubs). For certain special machinery and equipment, however, on which the Board's short-term plans for increased output depended—coal face machinery, diesel locomotives and conveyor belting—detailed programmes were quickly completed and bulk contracts were placed by the Board. This enabled the Ministry of Supply to look after the total requirements of materials and components for these items. The progress of deliveries of items not included in the programmes had to be checked order by order by the Board's local supplies staffs, who could look to the Ministry of Supply to find materials and components for manufacturers who were in difficulties.

181 The use of more belt-conveyors for the transport of coal below-ground was an important part of the drive to increase output. This increased the demand for ball-bearings, electric motors and conveyor belting, all of which were scarce. Much new conveyor belting was also needed to replace worn out belting, which was causing a serious loss of coal. To supplement home-produced supplies, the Board placed contracts for belting in Belgium, Holland and the U.S.A., and contracts for ball-bearings in Austria and the U.S.A. New capacity for the production of electric motors became available in this country at the time it was needed. Steel allocations to the Board for use in collieries, and to manufacturers for making mining machinery, were greatly increased. The Areas referred particular difficulties direct to the British Iron and Steel Federation.

182 The Board had to satisfy themselves that the prices they paid were reasonable. They made most of their purchases in competition with other users and at open market prices, and here they experienced no difficulty. In some cases negotiations were carried on with manufacturers to fix national prices and rates of rebate and discount. The Board also bought mining machinery from firms which specialised in making it. They were the sole or main customer, and there was no open market price. The Board satisfied themselves in each case that the price was reasonable.

183. By the end of the year the shortage of supplies had to some extent been overcome. Deliveries of coal face machinery, conveyor belting and diesel locomotives had increased considerably, as is shown by the table below.

DELIVERIES OF MAJOR ITEMS OF UNDERGROUND MINING MACHINERY AND EQUIPMENT

	1947	1946
<i>Conventional Items</i>		
Coal Cutters	898	775
Belt Conveyors	1,564	1,212
Other Conveyors	864	818
<i>Newer Types</i>		
Power Loading and Cutting—and Loading Machinery	91	111
Underground Haulage Locomotives]	62	28
<i>Conveyor Belting (million feet)—</i>		
Home Manufacturers	8 80	6 81
Other Sources	32	20
	9 12	7 01

184. Deliveries of steel increased sharply towards the end of the year and in the last quarter collieries received 15 per cent. more than the average deliveries for the first three quarters, although certain types of steel—such as light rails, arches, and pipes for dust suppression—remained scarce. The Area supplies organisations were operating and they were able to see that no colliery suffered a serious loss of production

185. The main task was to ensure that output was not lost through shortage of supplies and the maximum efforts of the supplies organisation were needed to achieve this end. For this reason the longer term aspects of supply had to take second place—the setting up of Area stores depots, the improvement of stores control, and standardisation. However, more efficient systems of stores control were instituted at the most backward collieries and some progress was made towards uniform systems of store keeping and a common nomenclature. The first moves were made towards the standardisation of equipment, including items for which the demand will be increased by the Board's long-term plans

Long Term Plans : The First Steps

186. The need to produce more coal during 1947 and 1948 was so urgent that the Board's long-term plans were, to some extent, thrust into the background. The Board would have failed in their duty if they had spent time and energy on long-term projects at the expense of immediate output. As the year went on, however, it was possible to devote more time to plan the collieries of the future.

187. Fortunately, part of the preliminary work of long-term planning had already been done before the Board took over the mines. In September, 1944, a Technical Advisory Committee was appointed by the Minister of Fuel and Power "to examine the present technique of coal production from coal face to wagon, and to advise what technical changes were necessary in order to bring the industry to a state of full technical efficiency." The Committee made its report—the "Reid Report*"—to the Minister in March, 1945.

188. The recommendations of this report were sweeping. They included the development of "horizon mining", in which straight, level, underground roads are driven through the strata, the introduction, wherever possible, of the "room and pillar" method of coal-getting, the maximum employment of coal-cutting and loading machinery, the replacement, where possible, of the existing method of rope haulage by locomotive and conveyor haulage, and the increased use of electricity underground. The report stressed the importance of improved underground ventilation and lighting and the general reconstruction of the surface plant at most mines. It emphasised the urgent need for new sinkings and the advantages to be gained from large mines, and advocated (on technical grounds alone) the introduction of a five-day week in the industry. It also contained a large number of other lesser, though important, recommendations for the future development of the industry.

189. The first thing to be done in tackling this heavy task was to set up the right sort of organisation. It was realised from the start that the main work of preparing the schemes of colliery reorganisation and reconstruction must be done in the coalfields, supervised by the Divisional Headquarters, in accordance with the policy laid down by the National Board. To a large extent, therefore, the tempo of reconstruction during the year was determined by the rate at which it was possible to set up the Area and Divisional organisations—many of them seriously handicapped by lack of staff and accommodation, and all burdened with important immediate tasks.

* [Cmd 6610]

190. The next stage in the process of long-term development was for each Area General Manager to survey his Area and to prepare plans for it. To begin with, there were the schemes prepared by the former owners and sponsored by the Ministry of Fuel and Power. Some of these were well under way when the Board took over, but they all had to be reconsidered in the light of nationalisation. These schemes were broadly classified as follows:

New Collieries	2
Major Reconstructions } (Costing £100,000	37
Partial Reconstructions } and over)	21
New Drift Mines	4

191. There were, in addition, many minor schemes, each costing less than £100,000, the estimated total cost of which amounted to some £9,600,000. Clearly some of these schemes—both large and small—could be proceeded with immediately, but others needed close examination both by the Divisional and National Boards.

192. After reviewing the existing plans, Area offices turned to preparing additional plans of their own. (In some instances, where the setting up of Area planning staffs was delayed, much of this detailed work was in fact done at Divisional Headquarters.) Divisional offices co-ordinated the Area plans and decided on their relative urgency. Towards the end of the year the planning work was sufficiently well advanced for Headquarters to call for an account of what was being done in each Division, to enable work on the first national plan to be started (*see* Chapter X). When this plan is completed, Headquarters will be able to give Divisional Boards their long-term output targets and advise them on the policy to be followed in incurring capital expenditure. It will be for Divisional Boards to estimate the labour strength they will need. The industry has had to take on many more men as quickly as possible in order to increase output. On the other hand if the mines are to be made really efficient, output per man must be increased by the introduction of modern machinery and mining methods. From an early date in the period of re-organisation, therefore, the industry should need progressively fewer workers. This does not mean, of course, that men being taken on now will be laid off later. There is a large proportion of relatively old men in the industry at present, and as these retire, the total strength will shrink despite the intake of new recruits. It is particularly important that new recruits shall be taken on mainly in the Areas where the long-term developments are planned. Moreover, it will not be enough merely to ensure that numbers are adequate. As more complicated mechanical processes are introduced into the mines there will be a greater demand for technical skill and knowledge.

193. Apart from the main task of producing and co-ordinating development schemes, there are other things to be done to prepare for the future, for example, the Board must search for new coal measures to be worked when known measures are exhausted. They have therefore collaborated with the Geological Survey, and have planned an important programme of boring and exploration in all Divisions. The amount of boring being done is three times what was usual before the war. Another thing to be done is to avoid, as far as possible, the conflict of interest which tends to occur between underground mining and surface development. It may be necessary in some circumstances to leave workable coal in the ground to avoid damage to property on the surface due to subsidence; while in other circumstances it may be better to refrain from building on the surface in order that valuable coal may be won. Much can be done by the careful timing of long-term projects, both surface and underground, and the Board are already working closely with the Ministry

of Town and Country Planning. Divisional Boards are co-operating with the Ministry's Regional Controllers, and are represented on many local planning committees.

194 Perhaps the most important general aid to long-term progress is the development of research. The Board must naturally ensure that all their Production staff can take advantage of the latest mining techniques. A Production Research Organisation has therefore been set up. This organisation has taken over the work previously done by the Ministry of Fuel and Power's Mechanisation Advisory Committee, and has already begun a careful study of many new technical developments. Whenever it has made an investigation, a full account of the results has been given to production engineers throughout the industry. Much study has also been given to the technique of cutting and loading in one process, to "continuous" mining, power stowing and the modernisation of haulage by the use of locomotives underground. The main procedure adopted in undertaking this research work has been to set up a Central Committee consisting of engineers and scientists from Headquarters and Divisions with Sub-Committees specialising in various aspects of mechanisation. Representatives of the Board have also been to America and continental countries to study mining methods there. In carrying out production research, the Board have collaborated closely with the manufacturers of machinery. They are endeavouring to cut down the excessive numbers of different types of plant. Electrical plant is being standardised, particularly in voltages and frequencies. Progress has been made in agreeing a standard range of mine cars carrying $1\frac{1}{2}$, 2, $2\frac{1}{2}$ and 3 tons of coal. Work has been done to simplify the specifications for underground supports such as steel arches, props and bars. The Board have already decided to set up centralised workshops at all the larger groups of mines, but progress has been slow because of the shortage of buildings.

Increasing Manpower

195. The manpower target set for the Board by the Government was to get a total of 730,000 men on colliery books by the end of the year. This meant a net increase in employment of 40,000 men, and, since wastage was estimated at 60/65,000 men over the year, a recruitment of 100,000 was needed. The task was heavy and if it was to be achieved, the rate of recruitment, training and absorption had to be increased quickly.

196. The capacity of each Division to train and house recruits was far from elastic and if all the men were to be absorbed they had to be spread out among the Divisions. Not all the recruits could be sent to the Divisions with the highest productivity even if it had been desirable to do so. Because of the demand for particular qualities of coal, the location of consumers, and the capacity of the railways there were good reasons for attempting to increase the output in all Divisions. The Board therefore decided that each Division must absorb sufficient recruits to make good its share of total wastage and must take additional recruits in proportion to its share of the total numbers employed in 1946.

RECRUITMENT

197. Before the war, the industry's manpower had been recruited mostly from among local boys. During the war, local juvenile recruitment had become less and less adequate to meet the industry's needs and the field of recruitment had been deliberately extended to include both adults and juveniles from non-mining areas. Although the Board were convinced that in the future the emphasis must once again be put upon juvenile recruitment if the industry

were to have a balanced and well-trained labour force, for immediate needs the net would have to be thrown as widely as possible, especially as the raising of the school-leaving age in the summer might mean fewer juvenile recruits for a time. It was necessary to recruit, train and house many adults with no previous experience of mining. The Board also recruited many Poles, principally from the Polish Resettlement Corps, some of whom had experience of coalmining, but all of whom presented a special problem in terms of training and housing.

198 The Board did not take over from the Government full responsibility for recruitment until 1st April. During April a special campaign was launched to attract boys leaving school in June, and in May a special drive was begun in non-mining areas to attract not only boys but also men. During the year the Board also sought recruits among B A O R men due for demobilisation.

199 The Board had not only to get more men into the industry, but to get more men into direct productive work, that is work at the coal face. In selecting men and boys for training, normally they only took those fit and willing to work underground, who were therefore potential face workers. Those who did not make the grade would, nevertheless, be useful. They could release "oncost workers" who could be upgraded to the coal face. In general, the Board did not recruit men for surface work. In fact, it was their aim to get fit young surface workers underground, and it was decided that young men who could be replaced by older or unfit men and who would not go underground, must leave the industry.

200 In conducting their recruitment campaign the Board were able to point to the attractions of coalmining as an occupation. The Five-day Week had been introduced as a permanent feature, wages in the industry had moved nearly to the top of the list of all industries, there was a guaranteed week, payment during training and holidays with pay. In addition, the Board were able to point to the good chances of promotion for keen and intelligent men and to the growing interest of the job which increased mechanisation and the development of new mining techniques would bring.

RECRUITMENT OF POLES

201. The recruitment of Polish ex-Servicemen began early in the year. Agreement was reached before the end of January between the Board, the Ministry of Labour and National Service and the National Union of Mineworkers on the following conditions —

- (a) no Polish worker should be placed in employment without the agreement of the local branch of the N.U.M.,
- (b) Polish workers must join the N.U.M.,
- (c) in the event of redundancy Polish workers would be the first to go.

202. All Poles volunteering for coalmining employment were interviewed and classified by panels consisting at the outset of representatives of the Board, the Ministry of Labour and National Service, and the Union. The Union decided later that there was no need for their continued representation on these panels. Each volunteer was assessed in terms of his ability to speak and understand English, physical fitness, and general character. Those who were suitable in every respect but that of language were invited to make a further appearance when their English had improved. During the year, 8,600 Poles were interviewed of whom over 6,000 were accepted and placed in employment. Those accepted were required to undergo at least three weeks' training at adult residential training centres, and the first group of Poles began their training early in March. Polish mining engineers had been engaged to assist in the training.

203 In agreeing to the condition that no Pole should be placed in employment without the consent of the local branch of the N.U.M., the Board had assumed that agreement would not be unreasonably withheld. Unfortunately, opposition from some branches was encountered during the early months and a few continued to oppose the employment of Poles right up till the Autumn. The National and Area officials of the N.U.M. gave much help to the Board in overcoming this opposition. Nevertheless, there was a time when 1,000 Poles who had completed their preliminary training had been waiting several weeks to be found jobs.

204. The Poles have proved to be excellent workers and get on well with the British mineworkers. Opposition to their employment has practically disappeared.

RESULTS OF RECRUITING DRIVE

205. At the end of December there were 718,000 miners on colliery books, 12,000 short of the target.

206. The following Table analyses recruitment and wastage during the year.

RECRUITMENT AND WASTAGE—1947 COMPARED WITH 1946

	1947 (53 weeks)	1946 (52 weeks)
<i>A Recruitment</i>		
Juveniles (under 18)	14,654	12,691
Ex-Miners from H.M. Forces	12,255	27,862
Ex-Miners from other industries	28,960	19,817
From Residential Training Centres	15,865	4,835
Others	22,456	7,615
Total	94,190	72,820
<i>B Wastage</i>		
Net compensation and long-term sickness cases, deaths and retirements	17,273	34,229
Released from the Industry by the Ministry of Labour	19,990	} 42,789
Released on completion of National Service obligations	12,994	
Other wastage	17,768	
Total	68,025	77,018
<i>C Net Intake or Outflow</i>	+26,165	-4,198

207 Against a target recruitment of 100,000, some 94,000 men and boys had been absorbed, but wastage at 68,000 had been heavier than expected. Apart from 1946, when the figure was 77,000, wastage in 1947 was the heaviest since the manpower intake and outflow had been properly recorded. Despite the raising of the school leaving age in July, the recruitment of juveniles was over a thousand more than in 1946.

TRAINING

208. During 1947, 41,000 ex-miners returned to the coal industry. There were about 53,000 other recruits who were entirely new to the industry and who had to be trained from scratch. New standards of training had been set by Regulations made by the Minister of Fuel and Power which came into force

on the vesting date. Before the vesting date the colliery companies had been obliged by these Regulations to prepare schemes—to be approved by the Minister of Fuel and Power—for the preliminary training of new recruits both above ground and in training galleries below ground. Many of the colliery companies were ready with schemes, but some of the schemes only existed on paper. The Board took over these schemes and re-arranged them so that entrants to groups of collieries could be trained together. By the end of the year the Divisional Boards were operating 79 preliminary training centres, of which 19 were for juveniles only and 60 were for juveniles and adults. The Divisional centres were capable of training 11,000 juveniles and 34,000 adults in a year. These centres were not residential.

209 To give preliminary training to adult recruits who came from outside the coalfields the Government had set up Adult Residential Training Centres during the later years of the war. They were situated at—

Stoke	.	.	.	Staffordshire
Askern	.	.	.	} Yorkshire
Birley	..	..	..
Muircockhall	.	.	.	Scotland
Oakdale	.	.	..	South Wales

At the vesting date the number of recruits which these Centres could take at one time was about 1,250. It was necessary to expand the Centres rapidly to deal with the new recruits who were expected. The Centres were administered by the Ministry of Labour and National Service though the Board were financially responsible for them from the vesting date. At the Board's request new premises were erected, additional equipment acquired and double shift working, already in force at Muircockhall, was extended to Askern and Birley. On 1st August the Centre at Stoke was transferred to the West Midland Divisional Board who used it as a Group Training Centre for training local recruits. At that time the capacity of the remaining Centres was 2,000. On 1st October the National Coal Board took over the management of these four Residential Training Centres. By the end of the year the capacity had been increased to 2,500. During 1947 a total of 16,000 recruits had passed through the Adult Residential Training Centres and had found employment in the coal industry. Early in 1947 the Board also set up two juvenile Residential Training Centres in Durham at Easington and New Kyo in order to give preliminary training to juveniles. These Centres were operated by the Board and the local Education Authority jointly.

210. New recruits normally make their first contact with the industry at one or other of the preliminary training centres. They are received by staff who specialise in dealing with recruits and helping them with their problems.

211. Before recruits are allowed to work at a coalface used solely for coal production they have to do at least 80 days below ground. Coalface training itself takes place under the close supervision of a specially selected workman and lasts at least 60 days for the first operation to be learned and 20 days for each additional operation. The Regulations required that not more than four adults should be trained at one time on a coalface partly used for normal coal production, but to enable the Board to deal with the large number of men to be trained as coalface workers this requirement was relaxed. Even so, the Board encountered difficulty in training so large a number of inexperienced men in coalface operations. Faces or parts of faces had to be set aside, generally at the expense of immediate production or of the development of new production faces. In addition, the five-day week, which meant fuller attendance of face-workers on Monday to Friday, reduced the amount of face room available. As time went on, the Board found that though they were training enough men

to replace the wastage of coal face workers, they were not getting a substantial increase in the number of face workers. Towards the end of the year, a training target was set for each Division designed to increase the total number of faceworkers in the country from 290,000 at the end of the year to over 307,000 by the end of 1948. The object is not only to increase the number of faceworkers but also to increase the proportion of faceworkers to other workers.

212. Apart from the training of recruits to fit them for underground work, special training in the servicing of underground coal face machinery has been carried on by the Mechanisation Training Centre at Sheffield. This Centre had been set up by the Ministry of Fuel and Power and the Ministry of Labour and National Service in 1943, and it passed into the Board's hands at the beginning of July, 1947.

213. Six normal courses were operated at the centre as follows :—

Course	Duration of Course	Description
A	4 weeks	Training of skilled fitters and electricians on new types of machinery
B	26 weeks	Training of young unskilled miners so that they may undertake the day-to-day maintenance of coal face equipment. The course comprises both electrical and mechanical work
B (E)	16 weeks	As for Course B except that electrical work only is done
B (M)	16 weeks	As for Course B except that mechanical work only is done
C 1	2 weeks	Training of operators of coal cutting machines and power loaders
C 2	2 weeks	Training of under officials in charge of highly mechanised districts

In addition, courses are occasionally arranged to meet special needs.

214. The capacity of the centre is for 360 students, and 1,450 passed through during the year. As the degree of mechanisation in the industry is increased, and the scheme for training apprentices gets under way, the need for training in mechanisation will assume greater importance.

215. To deal with all the new responsibilities for training which had been imposed upon the industry the Board had to appoint specialist staff. The need for this had been foreseen. In 1946 the Minister of Fuel and Power had established the Staff College at Nuneaton. Its original object was to provide instruction for Training Officers at coal mines who were to be appointed under the new Regulations. In September, 1946, however, new courses for Chief Practical Instructors and Head Colliery Lampmen were introduced. The Board took over the College in April, 1947. Most of the Training Officers had attended the College in 1946 and had taken a short course lasting two weeks. During the year new courses were started for Welfare Officers, Recruitment Officers and Training Centre Managers. A total of 1,692 students attended the College during the year.

HOUSING AND HOSTELS

216. When the Board informed the Government in February of their policy for immediate coal production, they stressed the need for more houses and other accommodation if the recruitment target was to be achieved.

217. In June, the Ministry of Health asked the Board to list two or three places in each Division where the immediate erection of a number of houses would give the best results. The Board then prepared a "short list" of 5,000 houses. Special Committees were set up in the coalfields consisting of the Principal Housing Officers of the Ministry of Health, representatives of the Divisional Boards and of the Local Authorities concerned. At the beginning of the year the number of houses let to miners averaged just over 600 a month. By the end of the year, it was over 1,100 a month. Although this increase was encouraging it fell far short of what the Board had hoped for. It did not keep pace with the intake of some 8,000 workers a month, of whom a little more than 1,000 were juveniles.

218. The Board resorted to the extension of hostels as a short-term expedient. Hostels for miners had been the responsibility of the Ministry of Labour and National Service. They were managed on behalf of the Ministry by the National Service Hostels Corporation. They were run at a loss. The Board took over responsibility for them and the Corporation continued to run them as the Board's agent. Thus, the coal industry incurred expenditure which is carried for some industries by the Government. It amounted during the year to £651,000.

219. However, the Board needed more accommodation. During the war many hostels originally built for miners had passed into the possession of other Government Departments and the Board asked for a number of these hostels to be transferred to them, and this was done. Divisional Boards took over or adapted camps, most of them Army camps, within easy reach of the pits. In this and other ways the hostel capacity for miners increased during the year from 12,900 beds to 18,500. Many newly recruited miners have been able to find themselves lodgings. Local Authorities and the Regional Welfare officials of the Ministry of Labour helped by encouraging people to take miners as lodgers.

Health and Safety

220. The Coal Industry Nationalisation Act imposes many duties and obligations on the National Coal Board, but of them none is more important than the obligation to provide for the safety and health of the persons whom they employ. The coal industry's yearly bill for compensation to the victims of accidents and industrial disease is about £10 million. That is only part of the whole cost in terms of money and is as nothing to the annual toll of human suffering.

SAFETY ORGANISATION

221. Now, as before nationalisation, the Minister of Fuel and Power is responsible for making Regulations under the Coal Mines Acts prescribing minimum standards of safety. His Majesty's Chief Inspector of Mines, an official of the Ministry, and his staff of local inspectors, are the agents through whom the Minister enforces the Regulations. Colliery Managers are responsible at law for complying with the safety Regulations. Within the limits imposed by the Regulations, the law allows them discretion in applying safety measures appropriate to local conditions.

222. It is the duty of the Board to ensure that colliery managers are given the best possible guidance on safety methods and safety techniques, to devise new methods and techniques and, when accidents occur, to analyse the causes and apply the lessons for the benefit of the industry as a whole

223 The Board have appointed a Chief Safety Officer at their National Headquarters. Safety Officers have been appointed at Divisions, Areas and the larger collieries. There is also a Safety Officer for each group of smaller collieries

224. At the National Headquarters a Standing Committee of Board Members was formed to supervise the development of safety measures and to stimulate safety activities throughout the industry. When serious accidents occur they are immediately reported to Headquarters, the circumstances are enquired into and action is taken to apply the lessons learned

225. When the Divisional Boards assumed control of the coalfields they found that standards of safety varied from colliery to colliery. They made it their business to ensure that the best practice was applied at all collieries. Some of them found it necessary to lay down general codes of safety practice for the guidance of colliery managers. Others were able to rely to greater or less extent on the good mining practice which had grown up in the coalfields now under their charge

SAFETY RESEARCH

226 During the year the Board's mining engineers sought to devise new practical methods for improving standards of health and safety. For example, research work was continued on what is known as strata control—the control of the strata undermined by colliery workings. This has an immediate bearing on the stability of the roofs, sides and floors of underground workings, but indirectly control of strata may affect the arrangements for transport, ventilation and the firing of shots. Strata control also affects the quantity of noxious gases which may be emitted from the coalface or collect in the pit, and the amount of dust produced during the getting of coal.

227. Formerly the problems of strata control were studied by the Safety in Mines Research Board (of the Ministry of Fuel and Power) for whom research was undertaken by a group of the Ministry's mining engineers in Sheffield. The Ministry also financed research on strata control by mining engineers in other coalfields not employed directly by the Ministry but employed by committees, sponsored by the local Institutes of Mining Engineers, which received grants from the Ministry. The Board took over this work from the Ministry. The staff of the Safety in Mines Research Board engaged on it has been transferred to the National Coal Board and the mining engineers whether or not employed by the Ministry have entered the service of the Board

228 The Board's mining engineers also carried out experimental work on fluorescent lighting in collaboration with the Board's scientists. Earlier attempts had been made to improve the low standard of lighting at the coalface. The ordinary tungsten lamp had been tried but there were difficulties about it. The fluorescent lamp is preferable in many ways. It gives more light with less glare and is safer. The first installation was completed during the year at Chislet colliery in the Board's South Eastern Division. The results were encouraging. Eight more experimental installations in various coalfields have been planned and will be introduced as soon as equipment is available. Better lighting at the coalface should lead to a reduction in the accident rate, improve the health and comfort of the workers and increase production

229. Important experimental work was also carried out, again in collaboration with the Board's scientists, into the problems of dust suppression. The presence of dust suspended in the air not only increases the risk of fires and explosions, but is the cause of an occupational disease of the chest, pneumoconiosis. Much work had been done by some colliery companies before nationalisation on dust suppression. Some of the preventive measures which are being further investigated are :—

1 *Coal Face*

- (a) Hand spraying of broken coal.
- (b) Application of water during the cutting of coal.
- (c) Water infusion—the application of water under pressure through boreholes made in the coal.

2. *Roadways*

- (a) The consolidation of the floor dust by means of water sometimes aided by chemical agents.
- (b) The trapping of dust by hoods over transfer and loading points aided by water or mist sprays, or by the use of the latter only. The use of suction fans is also being considered

3. *Stone Drifts*

- (a) Wet-drilling by means of water sprays impinging on the drill hole or by injection through the drill rods.
- (b) Trapping the boring dust by means of compressed air and sucking it into a container.

230. The Board are also investigating the effects of different forms of drill bits and different boring speeds on the production of dust in different kinds of coal measure rocks, work is also being done on the development of suitable respirators. The Board's researches into dust suppression are complementary to those conducted by the Dust Control Laboratory of the Ministry of Fuel and Power at Sheffield and are closely co-ordinated with them

ACCIDENTS IN 1947

231. Much of this experimental work it is hoped will bear fruit in the future. In 1947, despite all precautions, the accident rate remained high, as shown in Table 25 of the Statistical Appendix. The rate was higher than it was in the preceding year. The Board much regret to report that there were four major colliery accidents during the year, the most serious of which was at the William Pit, Whitehaven, Cumberland, in the Board's Northern Division

232. On 1st August an explosion occurred in the Six Quarter Seam in the William Pit and 107 men were trapped in the workings. The William Pit is old in the history of British mining, having been sunk well over a hundred years ago. At the time of the accident coal was being wrought from two districts in the Six Quarter Seam which lie just over two miles from the shaft bottom, out under the Solway Firth and some 700 feet below the sea bed. The Cumberland coal seams give off large quantities of inflammable gas as do those in many other coalfield districts, and the ventilation of the William Pit, and those other collieries which lie along the sea coast where the workings are far from the shaft bottom and out under the sea, constitute a difficult problem for the mining engineer.

233. When the explosion occurred there were 119 men in the pit. Of these men, 12, who were working near the shafts and on the haulage roads far from the seat of the explosion, managed to escape quickly and made their reports of what they had seen and heard below ground. A large-scale rescue operation was put in hand. The first team was quickly on the scene, and during the ensuing days 149 trained rescue workers were employed, summoned from rescue stations in Cumberland, Durham, Northumberland, Lancashire and Lanarkshire. Working in shifts night and day, wearing self-contained breathing apparatus, the men fought their way along some hundreds of yards of roadway blocked at intervals by big falls of roof.

234 It gradually became apparent from the large falls of roof which had taken place and by the fact that the ventilating system had been disrupted that there was little or no hope of anyone escaping alive from the affected districts. At about this time, however, some 21 hours after the explosion had occurred, three of the men involved in the explosion walked out from the workings to be met by the rescue teams. Their escape was due to the sound pit sense of their leader and the courage and determination which all three had shown in the face of danger.

235. When the explosion occurred the men working in the affected district had been killed outright. The remainder, who were working in the adjoining district, had been cut off from the shaft bottom by carbon monoxide gas and roof falls. A number of these men collected at a point some two-and-a-half miles from the shaft bottom with the object of trying to find a safe area out of the flow of the return airway which was by that time carrying a dangerous concentration of gas. Two of the men accompanied their leader to a safe place further into the workings where the three remained for some 20 hours. Eventually they returned to the shaft bottom passing on the way the bodies of some of their comrades. The explosion had shattered a main air crossing, and it was five days before the rescue teams, working under great difficulty, were able to restore the ventilation.

236 When the rescue operations were completed, work began in the William Pit to remove the falls of roof and to repair the damage caused by the explosion. The colliery was expected to be working again normally early in 1948, and meanwhile those men who were not engaged on recovery work had been found employment at neighbouring collieries.

237. A formal investigation into the cause of the explosion was ordered by the Minister of Fuel and Power. This was opened by His Majesty's Chief Inspector of Mines on 7th October. The proceedings lasted until 10th October and the Chief Inspector made an Interim Report on his findings to the Minister, which was published on 15th October, 1947 (Cmd. 7236). The immediate cause of the accident was the firing of a "cuckoo" shot (i.e., one fired into the roof between a long wall coalface and the waste) in order to bring down stone for use as packing material. The shot, penetrating a break in the shot hole, ignited gas in a "bed separation cavity" and this in turn ignited an explosive accumulation of gas further back in the waste.

238 While rescue operations at Whitehaven were still proceeding, there was an explosion at the Louisa Pit, Durham, also in the Northern Division. It occurred on 22nd August—21 persons were killed and three were injured. The explosion was caused by the striking of a match (contrary to Regulations) in an explosive atmosphere. Two other explosions causing heavy loss of life occurred in the Board's North Eastern Division. The first occurred on 7th May at the Barnsley Main Colliery, South Yorkshire. Nine persons were

killed and 19 injured. The explosion was caused by a short-circuit in an electric cable. The second occurred on 9th September when there was an explosion at Thornhill Colliery, West Yorkshire. Twelve persons were killed and one injured. The explosion was caused by the illegal opening of a safety lamp in an explosive atmosphere.

DEVOTION AND BRAVERY

239 In these and other cases, splendid work was done during the course of rescue operations by the men at the collieries, by the staffs at the rescue stations, by doctors, nurses and first-aid men and by welfare workers of all kinds. Comrades risked their lives to save comrades. Rescue workers braved fire, flooding, explosion, blinding dust and falling roof to complete their perilous task. Many tales of heroism were recorded. Many more must have gone unrecorded. In an industry where personal bravery, inspired by deep comradeship, is a commonplace, it would be invidious to select individual exploits for special mention if recognition of the few were not a token of recognition of the many. The Board are proud to report that His Majesty the King was graciously pleased to approve a number of awards for signal acts of gallantry during rescue operations. The awards are shown in Appendix VII.

PREVENTIVE MEASURES

240 Altogether, 605 men most regrettably lost their lives in colliery accidents during the year. When fatal accidents occurred, there was a coroner's inquest and the surrounding facts and circumstances were exhaustively studied by the Board. It is easy to be wise after the event, and perhaps easier to form wrong conclusions when principal witnesses are dead. It is no part of the Board's purpose in this Report to allocate blame to individuals. Nevertheless, it was clear to the Board that practices at some collieries affecting ventilation, shot-firing, handling of safety lamps and electrical apparatus and the checking of contraband needed improvement. There was also a need for improvement in self-discipline in complying with statutory Regulations and local rules on the part of the men themselves. Instructions were issued by the Board stressing these lessons.

241. Immediately after the Whitehaven explosion an instruction was issued by the Northern Divisional Board prohibiting the firing of "Cuckoo" shots throughout the Division. The interim report issued by His Majesty's Chief Inspector of Mines recommended that "Cuckoo" shots should be prohibited. There were, however, to be exceptions. At some collieries "Cuckoo" shots under carefully controlled conditions are sometimes desirable in the interests of safety, for example, where there is no other practical way of obtaining material required for the building of packs to support the roof. It was agreed between the Board and His Majesty's Chief Inspector that in these circumstances shot-firing in the roof of the face could be permitted provided that —

- (i) the shot would only be fired on the direct authority of the manager,
- (ii) the firing would be rigorously supervised,
- (iii) "sheathed" explosives only would be used,
- (iv) shot holes would be drilled parallel to the coal face, to prevent the possibility of a flame being projected in the direction of a gas-filled waste,
- (v) everything possible would be done to ensure good roof control and avoid the separation of contiguous strata such as would cause a cavity in which gas could collect.

242 It was also agreed that, as a safeguard against perfunctory or hurried precautionary measures, the number of shots and the rate of firing for each Deputy and Shotfirer should be limited in accordance with the Manager's instructions after trial made under working conditions

243. The Explosives in Coal Mines Order has been amended accordingly

CO-OPERATION WITH MINISTRY OF FUEL AND POWER INSPECTORATE OF MINES

• 244 During 1947 the Board were in consultation with the Ministry on a series of new Regulations covering, among other things, mine supports, ventilation and standards of lighting. The Coal Mines (Support of Roof and Sides) General Regulations 1947 in particular raised a number of problems for the Board. They called for an increased use of steel and timber supports at a time when these materials were scarce. This difficulty was fully understood by the Ministry. The Regulations were temporarily relaxed. The Board are making every endeavour to comply with them in full as soon as practicable. This is one example among many of the close co-operation established between the Board's mining engineers and the staff of H.M. Chief Inspector of Mines both at Headquarters and in the coalfields

COLLIERY MEDICAL, NURSING, FIRST-AID, AND RESCUE SERVICES

Doctors

245 Before nationalisation some of the larger colliery companies retained the services of doctors to attend accidents and to advise the companies on claims for compensation for accident and disease. Only a few companies employed a medical officer full-time with the duty of caring for the general health of the men and ensuring sound pit hygiene. Taking their cue from progressive industrial concerns, the Board decided to set up a comprehensive health service throughout the industry. As a start a Chief Medical Officer was appointed at the Board's National Headquarters and medical officers were appointed by the Divisional Boards. Doctors will be appointed to large collieries and to groups of collieries in order to organise health services for the industry locally.

Medical Centres

246 Towards the end of 1945 the Minister of Fuel and Power gave a direction to the Miners' Welfare Commission that there should be a suitable medical centre at all new pithead baths. It was also planned to adapt existing pithead baths to provide medical centres. The cost was to be refunded by the Minister. The responsibility for these medical centres was transferred to the Board on 1st January, 1947, but the Ministry of Fuel and Power acted as agents of the Board until December, 1947

Nurses

247 It is the Board's policy to employ State Registered Nurses at all large collieries, but at present there are few nurses because there are not enough medical centres. At the beginning of 1947 there were 22 State Registered Nurses employed in the industry. By the end of the year the number had risen only to 37. The Board intend that the number shall be increased as rapidly as possible. Prompt treatment of a minor injury can avoid serious complications at a later stage, and experience shows that men are more willing to attend for first-aid treatment of minor injuries when it is given by a qualified nurse. Thus, at Church Gresley colliery in South Derbyshire, the number of men

attending the first-aid room in December, 1946, was 114. During January, the room was converted into a properly equipped medical centre with a State Registered Nurse in control, and in the next month 1,266 men attended.

First-Aid

248. Whether or not there is a State Registered Nurse at the colliery, there remains much important work for the first-aid men to perform. During 1947 their standard of efficiency remained high and they did excellent work when accidents occurred. Like the former owners, Divisional Boards organise and finance first-aid competitions to stimulate efficiency.

249. Normally morphia can only be administered to an injured person by a doctor, but the Home Office can authorise first-aid men to administer the drug at collieries where the first-aid organisation is of a sufficiently high standard. During 1947, an additional 99 collieries employing 87,000 men received this authorisation—making in all 467 collieries employing about 500,000 people.

Rescue Stations and Ambulance Services

250. Before nationalisation there were 37 rescue stations in the country controlled by 31 separate bodies. On 1st January, 1947, the assets vested in the board and the staff transferred to the Board's service. The rescue stations then came under the control of the Divisional Boards. The stations range from large, well-equipped establishments with permanent rescue corps of full-time highly trained men to small stations with meagre equipment used mainly for the training of volunteer rescue men from neighbouring collieries. The rescue arrangements had been developed and improved over a long period and there were no outstanding advances in technique and organisation during the first year of nationalisation. The rescue organisation performed its task with efficiency on all occasions. The special operation involving rescue teams from several parts of the country on the occasion of the Whitehaven disaster has already been described. The Board will maintain and improve the high standards already established. Their object is to ensure that the best standards of equipment and the best standards of training are adopted throughout the industry.

251. The Board took over all the ambulances which had been owned by the colliery companies and they have ordered a number of new ones. Under the National Health Service Act, 1946, which comes into force in July 1948, local Health Authorities will have to provide public ambulance services, and accordingly Divisional Boards are in touch with the local Health Authorities.

INDUSTRIAL DISEASE

252. In the coal industry there is a heavy incidence of industrial disease. Pneumoconiosis is perhaps the worst disease that the industry has to combat. The incidence is still most serious in South Wales, though it is diminishing. The numbers of persons certified in South Wales as suffering from the disease fell from 5,224 in 1945 to 3,700 in 1946, while the number for 1947 is 2,731. On the other hand, no doubt owing to the spread of mechanised methods which produce more dust, there has been a rise in the number of cases certified outside South Wales—from 445 in 1944 to 597 in 1945, and again up to a provisional figure of 775 for 1946. During 1947 the Minister of Fuel and Power appointed a National Joint Pneumoconiosis Committee in which a number of Government Departments, the National Union of Mineworkers and the Miners'

Welfare Commission participated as well as the National Coal Board. There are four sub-committees dealing with Dust Suppression, Medical Examinations, Medical Treatment and After-Care, and Industrial Rehabilitation, Re-Training and Re-Employment.

253. The Board set up a Committee of their own under the chairmanship of their Scientific Member. This was to ensure that their resources were energetically applied in support of the National Committee.

254. Nystagmus, which affects eyesight, is another important industrial disease peculiar to coalmining. Research into the cause of the disease was conducted during the year. Sufferers are treated at a rehabilitation centre operating under the aegis of the Miners' Welfare Commission.

255. Other industrial diseases common in coalmining are dermatitis (affection of the skin) and "the beats" (inflammation of the hand, knee and elbow). The Board hope that in the future improved working conditions and improved colliery hygiene, coupled with early diagnosis and expert treatment, will do much to control these diseases.

COMPENSATION TO VICTIMS OF ACCIDENT AND DISEASE

256. The Workmen's Compensation Acts relate the amount of compensation payable to loss of earnings, with provision for review if earnings after the accident go up or down or if the rates of remuneration in industry change. Over the years this has led to a good deal of discussion between representatives of employers and employees. In July, 1948, when the National Insurance (Industrial Injuries) Act comes into force, the Workmen's Compensation Acts will cease to apply to new cases, but it will be many years before payments under the Workmen's Compensation Acts cease to be made for cases arising before July, 1948. The Board felt that as a good employer they must do everything in their power to ensure that the Workmen's Compensation Acts were interpreted in the coal industry as sympathetically and humanely as possible.

257. At the suggestion of the National Union of Mineworkers, the Board set up a National Joint Committee to consider disputed cases involving members of the Union where normally the next step would have been recourse to a Court of Law. The Committee first met on 28th March, 1947. It has since met at regular intervals and has handled many cases. Most cases were settled to the satisfaction of the claimants. Only a few had to go to the Courts. In March, 1947, the Board brought to an end a practice which had existed in the industry whereby some men had been barred from re-employment in the industry solely because —

- (i) they had been disabled by an accident and their workmen's compensation claims had been settled by lump sum payments; or
- (ii) they had suffered from nystagmus; or
- (iii) though not certified as suffering from pneumoconiosis, it seemed likely that if they continued to work in a dusty atmosphere they might contract the disease

258. The Board decided that any such man could be re-employed if he was certified as being physically fit. If, in cases under (iii), a man was not fit for work underground he could be employed in a dust-free occupation on the surface. The Board considered whether to do away with the practice under which workmen's compensation claims had sometimes been settled by means of lump sum payments. There is certainly the danger that a man may get a lump

sum, fritter it away and then become destitute. On the other hand, the lump sum is an advantage to the man who wants to leave the coal industry and start life afresh, possibly by buying a small business. The Board decided that no workmen's-compensation claims should be settled by means of a lump sum payment unless conditions were satisfied ensuring that the claimant was fully aware of all the circumstances which he ought to take into account.

JOINT CONSULTATION ON SAFETY AND HEALTH

259. It is for the Board to devise and apply the best possible techniques for the prevention of accidents and disease, to see that the health and rescue services are fully efficient and to ensure that the victims of accidents and disease receive effective and humane treatment. There is, however, a heavy responsibility on each person employed in the industry to exercise the greatest self-discipline in observing safety rules and practice and, wherever he can, to contribute from his own experience suggestions for improving the health and safety of himself and his fellows. In short, there is a joint responsibility on management and men. This is recognised in the Coal Industry Nationalisation Act which requires the Board to set up joint machinery for consultation between management and men on safety and health.

260. Once an accident occurs, once misfortune is suffered, none could be more brave or more generous than the miner in going to the relief of suffering and distress. The same zeal must be shown by all in the industry in eliminating the causes of accidents and disease. The Colliery Consultative Committees, and the Consultative Councils at the higher levels, provide the medium for a combined effort by management and men to prevent misfortune and save life.

The Problem of Dirty Coal

THE DECLINE IN QUALITY IN RECENT YEARS

261. For some years before the mines were nationalised the quality of their output deteriorated steadily. In the past the thicker and cleaner seams were naturally worked first, so that as the coalfields grew older, thinner and dirtier seams had to be worked. A greater proportion of dirt is normally produced from thinner seams, particularly when these are worked by machinery. Recent figures showing the thickness of seams being worked are not available, but comparison between the figures for 1924 and 1944 shows a long-term trend towards the working of thinner seams.

PERCENTAGE OF TOTAL OUTPUT WORKED FROM SEAMS

Thickness of Seam	1924	1944
Under 2 ft	4.6	3.7
2 ft. and under 3 ft	17.6	22.0
3 ft. " " 4 ft	26.9	29.3
4 ft. " " 5 ft	23.9	24.2
5 ft. " " 6 ft	17.0	12.7
6 ft. and over	10.0	8.1

In 1944 coal worked from seams of 5 ft. and over represented only 20.8 per cent. of the total output, compared with 27 per cent. in 1924.

262 This tendency towards thinner seams is likely to continue for so long as coal is mined in Britain, though its effects can be offset by research, alterations in the design of machines, and general changes in mining methods. The problem of dirty coal is therefore long-term. To some extent it can only be solved by long-term measures.

263. In recent years, however, the quality of the coal supplied to many consumers has deteriorated for a number of special reasons. One has been the shortage of coal itself. While there has been a need to increase the quantity of coal mined at almost any cost, standards of quality have inevitably fallen. Because of the shortage of coal, many consumers have had to put up with qualities or sizes unsuitable for their purposes, and inferior coal (mainly fines and slurry) which before the war would have been dumped at collieries as unsaleable, has in recent years been bought and burned.

264. The steady introduction of machinery underground has increased the amount of dirt brought to the surface with the coal. When coal was hewn and loaded by hand the miner took good care that little dirt was sent to the surface. A coal-cutting machine, however, cannot distinguish between dirt and coal, nor can a power loader. Mechanical methods of cutting, handling and conveying coal break it up more than the old methods did and produce more "smalls", which are harder to clean than the larger sizes.

265. Dirt brought to the surface with the coal should be removed before the coal is sold, from the large coal by hand and from the smaller coal by washing or dry-cleaning. In fact, however, at many collieries the output is not cleaned at all because no cleaning plant has ever been installed. At others the capacity of the cleaning machinery is too small to cope with the increased quantity of dirt resulting from underground mechanisation. Many washeries and dry-cleaning plants are hopelessly overloaded with smalls and dirt. They have to do a job for which they were not designed, with the double result that much of the dirt is left in the coal and some of the coal is lost in the discard. During the war it was impossible to build new washeries and dry-cleaning plants, and difficult to maintain the existing ones in working order—let alone extend them.

266. While, for a decade or more, machinery was being installed in ever-increasing quantities underground, little additional cleaning capacity was being constructed on the surface. This lop-sided development may be illustrated by comparing the percentage of coal cut and conveyed by machinery with the percentage mechanically cleaned.

PERCENTAGE OF TOTAL OUTPUT

Year	Mechanically Cut	Mechanically Conveyed	Mechanically Cleaned
1930	31	17	30
1938	59	54	45
1946	74	73	47

Comparable figures for 1947 are not yet available but they are unlikely to be much different from the 1946 figures.

267. At many collieries the quality of the large coal which is hand-picked has also deteriorated. Some of the picking belts are too short, having been designed for use up the days when cleaner coal was brought to the surface. Labour for hand-picking is also scarce.

268 A further cause of the decline in quality of the coal marketed was the advent of opencast mining which now produces some 5 per cent. of the total national output. Owing to the way in which opencast coal is won—by mechanical excavators—it is often more dirty than deep-mined coal. As opencast sites are only temporary it is not worth building elaborate plants to clean their output, and, unless the opencast coal can be conveniently sent to a central cleaning plant, it has to be sold as it is. Opencast coal is produced by the Ministry of Fuel and Power, but is sold for them by the Board.

THE PROBLEM IN PERSPECTIVE

269 It should not be thought, however, that all the coal being produced is dirtier than it was before the war. The deterioration has in fact applied particularly to certain grades and types of coal. The following table shows approximately how the output of deep-mined coal is made up in terms of grades.

PROPORTION OF DEEP-MINED COAL BY GRADES

	Per Cent of Total Output
Large Coal	31 2
Graded	18 6
Cleaned Smalls	12 6
Unscreened	7 3
Uncleaned Smalls	16 3
Other Coal	5 2
Miners' Coal	2 7
Colliery Consumption	6 1
TOTAL	100 0

Most of the coal in the first three groups shown in the table—amounting to some 62 per cent. of the total output—is cleaned either mechanically or by hand. Some of the “colliery consumption”, “other coal”, and “miners’ coal” is also cleaned. Altogether some 70 per cent to 80 per cent. of the total output is therefore cleaned, either mechanically or by hand, and though there has been some deterioration in this coal for reasons already explained, it has not been great. It is the remaining 20 per cent to 30 per cent. of the output—mainly unscreened run-of-mine coal and uncleaned smalls—which gives most of the trouble. Some of the run-of-mine coal is of good quality and is readily accepted, for instance, by the gas industry, but much of it going to general industry is of relatively poor quality. About half of the uncleaned smalls—which represent the core of the problem of dirty coal—is burned by power stations, and most of the remainder goes to general industry. Much of it is distributed among a large number of consumers, each taking small amounts—unfortunately just the consumers for whom the effects of dirty coal are likely to be the most serious.

270. The Board estimate that the percentage of incombustible matter in the coal is about 10 per cent. of the total output. This is an average estimate which masks a variation of from 2 per cent. to about 30 per cent. Of the average of 10 per cent, however, about $4\frac{1}{2}$ per cent. represents the “inherent ash” which is part of the chemical composition of the coal and which cannot be removed until it is burned. It is the remaining $5\frac{1}{2}$ per cent.—representing

some 10 million tons of the Board's annual output—which consists of “free” dirt which could theoretically be removed. It would, however, not only be very expensive, it would be impossible to do so without losing at the same time much valuable coal. Nor would it be desirable from the point of view of many consumers. A high standard of cleanliness is required, it is true, by the gas and coking industries to ensure the maximum yield of gas and to provide clean coke for industrial and domestic consumers. Clean coal is also particularly needed to provide the low ash metallurgical coke needed to make pig iron. Domestic coal should also be clean. Some 35 per cent to 40 per cent. of all the coal consumed in the country, however, is used to raise steam. For this purpose a high degree of purity is not required, and coal with 10 per cent. of ash is suitable for many types of furnace so long as this percentage is consistently maintained. Much of the country's boiler capacity—particularly in the electricity industry—has been specially designed to burn coal with a high content of ash. Moreover, while the transport, handling and disposal of the ash represents extra cost to the consumer, so do new washeries and dry-cleaning plants. Close study of this problem in collaboration with consumers is necessary to determine the most economical degree of cleaning.

271. It is impossible to consider the quality of coal apart from its price. Many of the complaints made about dirty coal are really complaints about its price. Many consumers would, in fact, be quite willing to accept dirty coal if it were cheap enough. Since the price of coal was brought under control at the beginning of the war no attempt has been made to keep a proper relationship between the prices of the different grades of coal. Each increase in price has taken the form (for the sake of administrative convenience) of a flat rate addition to all existing prices. While the average price of coal is now rather more than double what it was before the war, the prices of some of the poorer grades are three or four times what they were. Part of the problem of dirty coal will therefore be solved when the Board introduce the new price structure.

IMPROVING THE QUALITY OF COAL

272. The problem of dirty coal is an urgent one for the Board, if only because it will be increasingly difficult to sell the poorer grades as output increases and coal becomes less scarce. When the Board took over the mines, information about the quality of the coal produced was incomplete and throughout 1947 data were collected to enable all the coal being produced to be classified in terms of its rank, size and ash content. It is only when the problem is broken down in this way that it will be possible to determine its full measure. Meanwhile the Board have set up a coal preparation organisation within the Production Department. At Headquarters the Chief Coal Preparation Engineer is responsible for co-ordinating and, to some extent, standardising the work of Divisional Coal Preparation staffs, and for advising them where necessary. The Chief Coal Preparation Engineer is also in touch with the manufacturers of plant through the Coal Preparation Plant Association. This ensures that the most urgent schemes get priority. There are Coal Preparation Engineers at all Divisional Headquarters and at most Areas.

273. While the main solution of the problem lies in the construction of new cleaning plants—which will take many years—a number of short-term measures have been taken. The existing coal preparation plants have been surveyed in some detail, control of cleaning operations has been tightened, and attempts have been made through the Colliery Consultative Committees to impress on everyone in the industry—and particularly coal face workers—the importance of producing cleaner coal. By means of routine analyses of the coal produced

and the systematic recording of complaints, attention has been focused on the "black spots" in coal preparation so that immediate remedies may be applied where they are most needed

274. On the vesting date it was discovered that some cleaning plants were not working, in particular, three plants in the Northern Division, three in the West Midlands Division and one in the East Midlands Division were idle. These were all started up as soon as possible. Wherever possible, coal produced at collieries without cleaning plant, or at collieries where plant is inadequate, has been transferred to other collieries for treatment before being sold. In the North Eastern Division alone such transfers amount to some 100,000 tons a year. In some cases—particularly in the East Midlands Division—it has been possible to transfer redundant plant from some collieries to others where it could be used more effectively. Much work has been done to overhaul, repair and extend existing plant. Screens have been adjusted in order to increase the size of coal going to the picking belts, thus making hand-picking easier, more men have been taken on for hand-picking, and lighting at the picking belts has been improved. Overtime and double-shift working have been introduced in preparation plants where practicable, more use has been made of storage bunkers to avoid overloading cleaning plant at peak periods and to make possible consistent blending of coal from different seams. In addition to all these measures, as output has increased it has also been possible to meet customers' complaints by re-arranging supplies so that they receive coal more suitable for their purposes.

275. Meanwhile, the Board have gone ahead with long-term measures to improve the quality of coal. Advantage has already been gained from new equipment. Automatic dirt extraction gear was fitted to many washeries during 1947, in the South Western Division two new complete coal preparation plants were put into operation, in the East Midlands Division new plants are now working at two collieries, in the Northern Division an important new froth-flotation plant for the cleaning of fines—costing £40,000—was started up, and in the North Eastern Division, froth-flotation plants were installed at three collieries. Considerable alterations and extensions to existing plant have been made in West Midlands Division. In addition to these improvements, which have already been put into effect, other new plant will soon be in operation. In South Western Division an additional preparation plant is under construction. Another plant in East Midlands Division is nearly completed. More automatic shale controls are to be installed in a number of plants in several Divisions, and two fines-cleaning plants are being built in the West Midlands. Taking the country as a whole, 45 new coal preparation plants with a capacity of about 14,000,000 tons of coal a year and costing £5,000,000 are operating, under construction, or ordered from manufacturers.

276. Considerable progress was made during the year with plans for the future. In Scotland tenders have been received for two complete coal preparation plants, and orders have been placed for a number of smaller plants for use at surface mines. In addition, a further 14 plants are planned to be introduced over the next few years. In South Western Division 11 washeries and 16 froth-flotation plants are under consideration. In the North Western Division two plants have been ordered, and plans for a further five are in hand. In the East Midlands Division experiments are being carried out at four collieries with new designs, and projects for new plants at four pits have been approved by the Divisional Board. In the Northern Division plans are nearly completed for 12 new cleaning plants and four froth-flotation plants. Over the next few years six new plants are projected in the West Midlands Division. Manufacturers' tenders have been received for a new plant in the South Eastern Division.

277. Altogether, in addition to the 45 plants referred to above, 140 new Coal Preparation Schemes are under consideration to deal with about 60,000,000 tons of raw coal annually. These will involve the Board in a considerable expenditure of capital—probably as much as £20,000,000 or £25,000,000. A standard plant has been designed which should enable manufacturers to increase their rate of output. The time lag between the initiation of a project and the date when the new plant starts working is often two years or more, so that most of the benefit from these schemes will only be obtained gradually. When all these new plants are in operation it is likely that some 70 per cent. of the total output of coal will be mechanically cleaned, compared with about 47 per cent. in 1946. The remaining 30 per cent. will either be hand cleaned, or will not need cleaning at all.

278. Although progress must be slow, there are signs that the decline in quality was arrested and even that a slight improvement took place during 1947. In the summer the Great Western Railway Company informed the Board that steps taken to improve the quality of the coal supplied in South Wales had helped the company to reduce its consumption of coal per engine mile, despite the heavier loading of passenger trains resulting from the reduction in services. The same applies to other parts of the main line railway system. Towards the end of 1947 similar evidence was obtained from another large-scale consumer of coal—the Central Electricity Board—to the effect that in the autumn the loss of capacity at power stations due to unsuitable coal fell to less than 200,000 kws—the lowest figure achieved for a number of years. During 1946 the loss was at times as much as 380,000 kws.

CHAPTER V

DISPOSING OF THE COAL

279. The Board must not only produce coal, they must also dispose of it. This task now resolves itself into three fairly distinct activities. There is first the commercial business of selling the coal to customers who wish to buy it, and secondly the control of coal supplies in accordance with Government instructions. Thirdly, as coal is such a heavy and bulky commodity, special attention has to be given to the problems involved in its transport from pit to consumer. In this chapter these three parts of the Board's marketing work are considered in turn. A special marketing operation—the import of American and Polish coal—is also described.

Commercial Tasks

COAL MARKETING BEFORE THE VESTING DATE

280. Before 1st January, 1947, the sale of coal was regulated by 17 District Selling Schemes, set up under the Coal Mines Act of 1930. These Schemes were prepared and staffed by the industry. They were co-ordinated by the Central Council of Colliery Owners, and were of three types. These may be broadly described as central selling, central control of sales, and group selling. Central selling had been adopted in Lancashire, Shropshire, South Staffordshire and the Forest of Dean. In these districts the colliery owner sold all his coal to a District Executive Board at an accounting price determined by prices paid in a past period. The District Board then resold the coal as a principal, and profits or losses made by the Board were divided among the colliery owners. Most districts, however, were not prepared to go so far as this. Twelve of them—

the most important being Scotland, South Wales, Northumberland and Durham—had adopted a system of central control of sales. Under this system the colliery owner sold his own coal to his own customers but was controlled by a sales committee in each district which issued permits prescribing tonnage, destination, minimum price and other conditions of sale. The Midland (Amalgamated) District had adopted yet a third system. In this district all the collieries were formed into groups and the sale of coal produced by each group was controlled by an agent responsible to the District Executive Board.

281. Under the Nationalisation Act, these statutory selling schemes were all dissolved and their staffs were transferred to the Board's service on the vesting date. Much of the Board's new marketing organisation is manned by these staffs regrouped in various ways

THE NEW MARKETING ORGANISATION OF THE NATIONAL COAL BOARD

282. The Headquarters staff of the Marketing Department is responsible for formulating the Board's marketing policy and is not normally concerned with the day-to-day work of marketing the Board's products. In each Division the Marketing Director of the Divisional Board is responsible under the Divisional Board for the sale of the Board's products in his Division. While public ownership provides a unique opportunity for the full rationalisation of coal marketing, it was clear from the outset that the organisation of the Board's Marketing Department would have to vary according to the special characters of the different coalfields. It would naturally be affected by the sort of coal produced, the different markets served and the extent to which the coal was carried away by rail or by sea. Divisions have therefore been left free to develop their own marketing organisation within the broad framework laid down by the Board. In one important respect the Divisional marketing organisations could not be uniform throughout the country; they could not always be designed to follow the Area organisation, which was adopted for production purposes. For example, while the South Western Division has been divided into eight Areas, six of these Areas have been grouped into two Sub-Divisions—based on Swansea and Cardiff—for marketing purposes. Traditionally, South Wales anthracite and Swansea industrial coals have been sold through Swansea, and the Cardiff and Monmouthshire coals have been sold through Cardiff. In Scotland the mines have been grouped into five Areas for production, but for marketing the two central Areas have been combined. In the North Eastern Division the eight production Areas have been grouped into five for marketing. In the North Western Division the Lancashire output is sold centrally. For the most part, however, coal is sold from the normal Area Headquarters at which Area Marketing Managers have been appointed.

283. The Board had also to consider their "outside" representation. Before the vesting date many colliery companies had offices in the main coal consuming centres to keep in touch with consumers and distributors. After nationalisation it was unnecessary to have so many different representatives in the same places duplicating one another's work. On the other hand, the producing Divisions would clearly need "outside" representatives to keep in touch with buyers and consumers, and to investigate complaints on the spot. The Board accordingly decided to open composite offices in the main consuming centres, representing the supplying Divisions. These offices are to be in London, Bristol, Birmingham, Manchester, Liverpool and Hull. By the end of 1947 the offices in Birmingham, Liverpool and Manchester had been opened. The remainder were due to open early in 1948.

THE DISTRIBUTION OF COAL

284. The Board's marketing organisation arranges the "first sale" of the coal as it leaves the pit (or the Ministry of Fuel and Power's opencast sites). After this "first sale," much of the coal sold for inland consumption—certainly more than half of it—is then distributed through wholesale merchants or factors. Most of the remainder is sold direct to consumers or retail depots by the Board, just as it was previously sold direct by the colliery companies. Coal has mainly been sold through the same channels as it was sold before nationalisation, with prices and margins controlled by Government Orders. Two changes have been made, however. In the first place, where coal is transferred from one part of the Board's organisation to another—for example, from a colliery to a National Coal Board retail depot—no distributor is now employed. In the second place, exclusive selling agencies of collieries are being ended. These are founded on contracts by which certain colliery companies handed over even the act of "first sale" to agents who sold their coal in particular markets or areas. Altogether some 30 million tons a year are estimated to have been sold in this way. The Board considered that these agencies were against the spirit of the Nationalisation Act, for they deprived the Board of any say in the disposal of the coal from the pits concerned. It might have been impossible, for example, for the Board to ensure that this coal was being sold without the "undue or unreasonable preference or advantage" which the Board enjoined to avoid by the Act. Wherever possible, these agencies have been ended by giving notice in accordance with the terms of the contracts. Others the Board have been able to end by exercising their option for the agents' assets. For the rest, separate settlements are being negotiated for the ending of long-term contracts which cannot be ended by giving a few months' notice. By the end of the year nearly all the agencies in five of the Board's Divisions had been dealt with and only a few remained in two other Divisions. In the South Western Division, however, where about three-quarters of the total output was originally sold through agencies, it will take some time to wind them all up. By the end of the year about half of the Board's output in this Division was still being sold through agents.

285. The Board are themselves distributors on a large scale through the acquisition of the assets of colliery companies which distributed their own coal. In particular, they own some 840 retail depots (mostly at collieries) through which they serve more than 411,000 domestic customers and distribute much coal to industrial firms. But though the Board's distributive business is important, the Board retail only a relatively small proportion of the country's coal. On the other hand, the Board are much interested in the distributive trade as a whole. Their responsibility cannot stop short of the consumer. The ultimate relationship between the industry and the trade has yet to be settled. It will be discussed between the Board and representatives of the distributors in 1948. In the meantime, most of the arrangements for the inland distribution of coal remain as they were before nationalisation.

RELATIONS WITH EXPORTERS

286. Discussions with representatives of one section of the distributive trade—the exporters—began before the end of 1947. In the past, most of the country's great export trade in coal has been carried on through firms which specialised in this trade and have built up valuable connections abroad over many years. During the war the trade came under Government control and the exporters' margin was fixed at 3 per cent. of the f.o.b. price. As part of the general "stand-still" arrangements adopted at the vesting date, the Board decided not to make any change for the time being. Indeed, as exports virtually ceased early in the year, there was no point in doing so. Towards the end of the

year, however, when exports were revived, the Board opened negotiations with the British Coal Exporters' Federation about the terms on which the Board would employ exporters. The Board reserved the right to export directly if they wished to do so. They suggested that exporters should not be selected to handle particular transactions by reference to "past performance" or their place on a waiting list, but that the wishes of overseas buyers and the established connections of exporters in the market in question should be taken into account. They proposed that registers of exporters should be drawn up, and that the Board should only sell to exporters on these registers. Any exporter could be included in the register so long as he agreed to certain conditions. The Board also suggested that the Government Order fixing the exporters' margin at 3 per cent of the f.o.b. price was now out of date. (This Order was, in fact, revoked by the Minister of Fuel and Power before the end of the year) A joint "working party" of the Board and the Exporters' Federation was accordingly set up to consider these proposals. Meanwhile, the Board decided that the exporters' remuneration should, for the time being, vary between nothing and 9d. a ton, according to the circumstances of each transaction, and should be paid by deduction from the Board's f.o.b. prices. Similar arrangements were made with the Seaborne Coal Traders' Association, representing shippers to Eire, a separate joint "working party" being set up to consider the arrangements for this trade. In this case the Board decided that for the time being the exporters should receive 6d. a ton to be deducted from the f.o.b. price.

CONTRACTS

287. One of the Board's first commercial tasks was to decide what was to be done about contracts with their customers. The Board took over automatically contracts of colliery companies for the supply of coal. These contracts varied in period and terms. Collieries in some districts—for example, Lancashire, Cheshire, North Wales, North Staffordshire and the Midland (Amalgamated) District—had adopted standard conditions of sale before nationalisation. Different conditions were used by other districts. In some, indeed, each colliery sold on what conditions it thought fit, so long as these did not breach the terms laid down by the District Selling Scheme. The Board realised that it would be to their own and their customers' advantage to introduce as soon as possible standard conditions covering all the Board's sales of coal (though in some cases allowance would have to be made for variations in local conditions). The Board also realised that the existence of long-term contracts would greatly complicate the introduction of a new price structure for coal. For these reasons, before the vesting date the Board suggested to District Executive Boards that the period of new or renewed contracts should be kept as short as possible. After the vesting date they decided that for the time being contracts should not be made to extend beyond the end of 1947, save in exceptional circumstances. Later, Divisions were allowed to contract beyond this date, but for not more than a year from the beginning of deliveries. Finally, at the end of 1947—when it seemed likely that the new price structure would be introduced during the following year—they were instructed to contract only "until further notice," or exceptionally up to 30th April, 1948. Meanwhile, work proceeded on the drafting of standard conditions of sale. In due course, draft conditions will be discussed with the Consumers' Councils and with other organisations representing consumers and distributors.

PRICES

288. The price of coal has been virtually under official control since 1939. Just before the beginning of the war the Central Council of Colliery Owners gave an assurance to the Mines Department that the general level of coal prices

would not be increased without the Department's agreement. In 1941 this assurance was extended to cover not only the general level of prices, but also the individual prices of different qualities of coal. Before the vesting date the Board renewed this assurance to the Minister of Fuel and Power. On the vesting date, therefore, the existing price structure remained intact. Since the beginning of the war the average pithead price of coal had been increased by more than £1 a ton, over and above a pre-war average price of between 17s. and 18s. a ton.

289. The price of coal had to be increased during 1947. With the agreement of the Minister of Fuel and Power, pithead prices were put up by 4s. a ton on 1st September, to meet an increase in the Board's costs—mainly due to the introduction of the five-day week in May. Corresponding increases were made in the prices of coke and patent fuels. On 1st January, 1948, a further increase in pithead prices of 2s. 6d. a ton had to be made. This increase was made necessary mainly by the agreements negotiated in the autumn of 1947 with the National Union of Mineworkers for the extension of working hours and the increase in the minimum wage. These price increases—like the wartime increases—were made in the form of a flat rate addition to all existing prices. This method had the advantage that it was easy to administer, but the disadvantage that it distorted the general structure of prices, making the poorer grades of coal relatively more expensive than the better grades. However, as the Board intended to introduce a completely new price structure for the industry as soon as possible, it was not worth while departing from the procedure followed since 1939.

290. In addition to the increase in pithead prices of 4s. a ton in September, the prices of coal for export and bunkers for foreign-going ships were increased by about 25s. a ton on 1st December, 1947, to bring them more into line with world prices.

291. The cost of coal to consumers was also increased during the year by an increase in railway freight rates introduced on 1st October, 1947.

RELATIONS WITH CONSUMERS

292. The Board are naturally in close touch with the consumers of coal and by-products through their normal day to day commercial operations. The Board also attach great importance to their relations with consumers' organisations. The Nationalisation Act has created a monopoly in the supply of coal, and the Board fully appreciate the need for proper safeguards in the interests of consumers. They therefore welcomed the setting up of the Industrial and Domestic Coal Consumers' Councils, established by the Nationalisation Act, to represent the interests of each of the main classes of consumers. During the year the Minister of Fuel and Power appointed the Deputy Chairman and the Marketing Member to represent the Board on both Councils. These Councils will provide a useful medium for the exchange of information of interest to producer and consumer. They must make an Annual Report to the Minister, and the Minister must lay the Report before Parliament. If necessary, they can at any time bring grievances before the Minister for action; but their main purpose must be to keep the Board fully attuned to the needs and wishes of the consumers of coal, and to keep the consumers' representatives in touch with the Board's policies and difficulties. Thus producers and consumers can each play their part in making the industry as efficient as possible. The Consumers' Councils met twice during the year. The Board have also been in touch with industrial and trade organisations representing particular sections of their customers. These contacts are valuable at present while the Board are responsible for controlling the flow of coal on behalf of the Government, but they should

be still more valuable when this control is no longer necessary. Throughout the year members of the Board have met regularly the senior officials of the railways and of the gas, electricity and iron and steel industries. The Board's marketing officers at Headquarters, Divisions and Areas have met their opposite numbers in these industries, and co-operated with them in solving their mutual problems. Representatives of the Board have held regular meetings with representatives of other organisations—for example, the Federation of British Industries, the Association of British Chambers of Commerce and organisations representing individual industries.

FUEL UTILISATION

293. The Board's membership in two organisations designed to encourage consumers to make the most efficient use of coal and other solid fuels should also be mentioned. Early in 1947 the Board decided—for an experimental year—to take the place of the Mining Association in the Coal Utilisation Joint Council. Other members of the Council are organisations representing coal distributors and the manufacturers and distributors of solid fuel appliances. The National Coal Board contribute three-quarters of the Council's funds. The aim of the Council is to promote greater efficiency in the use of solid fuel by giving advice to consumers. During the year the Council collaborated with the Ministry of Fuel and Power's Fuel Efficiency Branch and with organisations such as the British Coal Utilisation Research Association and the Women's Advisory Council on Solid Fuel. It published a number of books and pamphlets—mainly for local authorities, architects and builders—describing modern appliances and methods of heating, and took part in the campaign of the House-Building Industry's Standing Committee to show the improvements being made in modern houses. It held several exhibitions in various parts of the country, and ran training courses in sales services. The Board have also continued membership of the Solid Smokeless Fuels Federation, through the British Coking Industry Association and the former Anthracite and Dry Steam Coal Committee of South Wales. This Federation is an association of producers whose object is to promote the use of smokeless fuels, by publishing pamphlets and holding exhibitions. The Board have renewed their membership of these organisations for a further year.

ADVERTISING

294. Before nationalisation a number of colliery companies advertised their coal and other products regularly in the trade and daily press. As the object was to increase the sales of particular collieries at the expense of others, the Board have decided to discontinue the advertising of coal, though each Division has been left free to advertise its retail services. The Board considered the possibility of some form of "prestige advertising," but decided that the best form of advertisement would be to let an efficient service to the public speak for itself. On the other hand, the Board decided to advertise some products where they were not the only producers, or where they particularly wished to bring products to notice.

The Control of Coal Supplies

THE COAL SUPPLIES ORGANISATION

295. Not only have the Board to sell the coal they produce (and coal produced by the Ministry of Fuel and Power's opencast sites), but also—for the time being—to see that it is distributed as the Government direct. In other words, the Board administer the Government's coal allocation scheme, by which coal is shared out to consumers in the national interest. During the war the

chief officer of each of the 17 District Selling Schemes was appointed by the Mines Department (later the Ministry of Fuel and Power) as their Coal Supplies Officer, responsible for controlling the distribution of coal from the pits in his district in accordance with the Government's policy. A number of inter-district committees were also set up (based on the pre-war co-ordinating machinery of the Selling Schemes) to co-ordinate the flow of coal into certain parts of the country. These became known as Programming Authorities. The staffs of these Authorities—like the staffs of the Coal Supplies Officers—were taken over by the Board. On the vesting date, as the district organisation was superseded by the eight Divisions of the National Coal Board, the Minister of Fuel and Power appointed eight Divisional Coal Supplies Officers in place of the District Coal Supplies Officers. The individuals appointed were in fact the eight Divisional Marketing Directors of the National Coal Board. As Coal Supplies Officers, however, they were directly responsible to the Minister of Fuel and Power and not to headquarters of the National Coal Board. By 1st May, 1947 the headquarters organisation of the National Coal Board had developed sufficiently to enable it to take over executive responsibility from the Ministry. On this date the senior officials of the Marketing Department at headquarters were appointed as National Coal Supplies Officer and Deputy National Coal Supplies Officers of the Minister of Fuel and Power. Their function is to advise the Minister and to translate his policy into executive instructions to the Coal Supplies Organisation.

THE METHOD OF COAL SUPPLIES CONTROL

296 The Control Organisation taken over and developed by the Board therefore consists of three elements—National Coal Supplies Officer, Divisional Coal Supplies Officers, and Programming Authorities. Briefly, the procedure adopted is as follows. From time to time the Government review the coal situation and they decide how the country's coal supplies shall be shared out—for example, they decide which classes of consumer shall have priority, and how much stocks shall be built up or run down. In working out their policy, the Government are assisted by an inter-departmental committee called the Fuel Allocations Committee which specialises in the control of coal supplies to "industry"—iron and steel, engineering and other manufacturing industries. The National Coal Supplies Officer and his deputies attend this committee. The main reviews of the coal situation take place every six months and cover a half year representing either the "coal summer" (May—October) or the "coal winter" (November—April). As a result a "coal budget" is drawn up, which forecasts output over the period and allots the tonnages to be supplied to the different categories of consumers. The National Coal Supplies Officer is then responsible for putting the Government's decisions into effect.

297. The first step is to work out how much individual firms or depots are to get out of the global tonnages or programmes settled by the Government for the various categories of consumers. For industrial consumers and other large users of coal, this is done by the Programming Authorities, which are staffed by the Board and operate under the control of the National Coal Supplies Officer. National Programming Authorities at the Board's headquarters deal with the allocations for gasworks, power stations, railways and coke ovens. Local Programming Authorities in different parts of the country deal with the allocations for other industrial consumers. The four main local Programming Authorities are situated in London, Manchester, Birmingham and Sheffield. Among them these Authorities allocate coal to all industrial consumers throughout the country, except those situated in parts of the country covered by the

Board's Scottish, Northern and South Western Divisions Here the Marketing Directors of the Divisional Boards, who are the Coal Supplies Officers, also act as Programming Authorities.

298. The allocation of house coal to depots is carried out by yet a different system—the House Coal (Emergency) Distribution Scheme This scheme is staffed by the coal distributive trade and operated by the trade on behalf of the Ministry of Fuel and Power The total allocation of house coal, decided on by the Government in the "Coal Budget," is broken down first into regional allocations and then into individual depot allocations by the officials of the scheme

299 When allocations to firms and depots have been determined, the next step is to decide from which coalfields the coal is to be supplied in each case. The Programming Authorities tell Divisional Coal Supplies Officers how much coal and what sorts of coal they are expected to supply and to whom they are to supply it The National Coal Supplies Officers also tell them how much must be sent to the house coal depots. By adding up all the allocations of the consumers to be served from his Division, each Divisional Coal Supplies Officer can therefore make an accurate estimate of the total amount of coal he is expected to supply He then compares this estimate with the quantity he expects his Division to produce, and draws up a "budget" to show whether the Division is likely to have a surplus or a deficit. These Divisional budgets are consolidated into a national budget at Headquarters and a meeting is held in London, attended by representatives of all Coal Supplies Officers and Programming Authorities, at which the supply of coal to certain consumers is "switched" from one Division to another so as to even out deficiencies or surpluses A similar budget is prepared every four weeks, and meetings are held to even out inequalities which arise owing to fluctuations in output or changes in allocations

300 As soon as allocations have been made to consumers and the source of supply settled, the Divisional Coal Supplies Officer—in his capacity of Divisional Marketing Director of the National Coal Board—arranges the sale of the coal in the normal commercial way Though allocations are made to cover a period of six months, the Programming Authorities review the position of every consumer once a month to see whether his allocation is still appropriate and to find out whether he has in fact been receiving his due

301. This was the method adopted by the Board from 1st May to control coal supplies to all inland consumers. On 1st July the Board also took over responsibility for the control of coal for export and ships' bunkers As with inland supplies, the Government determine how much coal shall be supplied for these purposes and how much shall be shipped to each country. The National Coal Board then decide, in consultation with Divisions, where the coal is to come from Detailed control is exercised through a system of licences The Board have their own export officers at the ports who, acting on behalf of the Minister of Fuel and Power, are authorised to issue licences for export up to the limit of the Government's allocations Control of coal for bunkers is centralised at Headquarters where individual applications for bunker coal are checked with the Ministry of Transport The supply is then authorised through the export officers.

THE COAL SUMMER, 1947

302. The first task of the new control organisation was to administer the distribution of coal during the summer. Much of this work had to be done well in advance. The Government's coal budget for the summer—announced in

March—forecast an output of 83 million tons of deep-mined coal and six million tons of opencast. It may be summarised as follows —

COAL BUDGET—SUMMER, 1947

(26 WEEKS MAY—OCTOBER)

	Million Tons		Million Tons
Inland consumption	77 9	Stocks at beginning of period	5 0
Less saving by oil conversion	2.0	Deep-mined production . . .	83 0
	75.9	Opencast production	6 0
Bunkers and exports	3 1		
Target stocks at end of summer	15 0		
Total	94 0		94.0

This was an "austerity" budget. When it was drawn up it was hard to see what the effects of the five-day week would be. The budget's main purpose was to rebuild the country's depleted stocks in order to prevent a recurrence of the fuel crisis in the following winter, no less than 11 per cent. of the total summer output was earmarked to build up stocks. This meant the imposition of severe restrictions on consumption. Though the Government came to the conclusion that it was impracticable to ration gas and electricity, the use of either was prohibited for the heating of homes, and later this prohibition was extended to cover factories and other places of work as well. The railway passenger services were cut by 10 per cent. A total of two million tons of coal was to be saved by the conversion of railway locomotives, steel works and other industrial consumers of coal to oil burning. Domestic consumers were still restricted to a maximum purchase of 34 cwts a year in the south of the country and 50 cwts. in the north. Exports were to be negligible. Coal for ships' bunkers was to be restricted to vessels on essential voyages and even this quantity was to be squeezed to the minimum by the continuation of "double-bunkering" abroad. Despite all these restrictions there remained for current consumption by industry only enough coal to meet two thirds of its estimated needs.

303. It soon became apparent, however, that this budget was unduly pessimistic. During March and April output improved, stocks did not fall as much as was expected and the terms of the Five-Day Week Agreement led to a more hopeful outlook on the prospects for production over the summer. It was clear from the way negotiations proceeded during April that there was also a good chance of importing some coal from America and Poland. These considerations enabled the President of the Board of Trade to announce that when the summer programmes were introduced industry would be allocated more coal than the two thirds of its needs included in the budget. Firms were in fact to be allocated an amount equal to their consumption during the previous summer. Out of this, however, they were expected to build up their stocks to at least three weeks' winter consumption by the end of the summer. In order to encourage economy and stock building, firms were given a pledge that if they accumulated more than three weeks' supply this extra stock would not be taken into account in framing their winter allocations. On the other hand they were warned that if they failed to accumulate three weeks' stock they would receive

no extra help and would be allocated coal for the winter on the assumption that they had in fact three weeks' supply in hand. Though more coal was allocated to industry than was foreseen in the original budget the restrictions on other consumers remained in force. When coal was short industry was treated as the "residuary legatee." When supplies improved it was given a first charge on the increased output.

304 The more optimistic view taken when the summer programmes were introduced was in the main justified. During the 26 weeks of the summer the mines produced $1\frac{1}{2}$ million tons more than they produced in the previous summer, and nearly 7 million tons more than the budget forecast, some 600,000 tons were imported from America and Poland, and, partly owing to good weather, many consumers burned less coal than expected. Instead of an opening stock of 5 million tons at the beginning of the summer there was in fact 6 million tons, and the planned 10 million tons was put into stock during the summer. The actual summer production, consumption and stocks were as follows.

OUTPUT, CONSUMPTION AND STOCKS—SUMMER, 1947

(26 WEEKS MAY–OCTOBER)

	Million Tons		Million Tons
Inland consumption	84 02	Stocks at beginning of summer	6 36
Exports and bunkers	2 64	Deep-mined production	90 06
Stocks at end of summer	16 42	Fall in colliery stocks	0 20
		Opencast disposals	5 83
		Imports	0 63
Total	103 08		103 08

During the summer extra amounts were allocated to iron and steel works, coke ovens and certain industrial consumers (particularly those engaged in producing goods for export). However, despite the improvement in output compared with the budget, it was not possible to meet all allocations in full, and on an average, over the summer, disposals by collieries fell short of allocations by about 5 per cent. Though this deficit was small the programming machinery was heavily taxed to keep the coal flowing in accordance with the allocations—inevitably a difficult task during the months in which the miners take their holidays. Whereas total disposals from collieries came within 5 per cent. of allocations, there were serious shortages of particular grades of coal. At some times, for example, the supply of "cleaned smalls" was barely sufficient to cover 60 per cent. of the allocations. The Grimethorpe strike in Yorkshire, which caused a loss of output of nearly 600,000 tons, created particularly difficult problems for the Coal Supplies Organisation. The coal-field concerned produces much of the country's supply of gas and coking coal, and for a time Yorkshire coke ovens were reduced to 55 per cent. of their normal throughput. Industrial consumers also suffered. Emergency measures were taken by the Coal Supplies Officers to find alternative sources of coal and to spread the scarce supplies round to enable as many firms as possible to keep going. When the strike was over the flow of deliveries was diverted to replenish the stocks of firms which had been forced to consume them during the strike.

The Transport of Coal

THE NEED FOR A COAL TRANSPORT ORGANISATION

305. The coal industry, more than any other, is dependent on efficient transport. It is little use producing coal if it cannot be put straight into wagons, lorries, barges or ships, and carried away immediately. Coal is too heavy and too bulky to stock in any large quantity at pits. The physical process of putting it on the ground and picking it up again is laborious and expensive. The amount that consumers can hold in stock is limited. Coal must therefore be carried away from collieries in a smooth continuous flow, otherwise pits stop winding, output is lost and consumers go short. The mere bulk of the coal, coke and patent fuels produced in Britain creates important transport problems. Two-fifths of all the freight carried by the railways consists of coal, and nearly half the country's fleet of railway wagons is used to carry it. Therefore those responsible for producing coal and those responsible for its transport must always work closely together.

306. On the vesting date coal was scarce and consumers' stocks were low and it was important that the coal should flow. Yet at that very time the transport system was in serious difficulties, which were becoming worse: rail traffic was restricted and wagons were being rationed in accordance with priorities laid down by the Government (coal had an over-riding priority). In setting up their new organisation, the Board decided to create a special branch devoted to the maintenance of the smooth flow of coal away from the collieries.

307. The railways in particular needed some central organisation whom they could deal with on the movement of coal throughout the country. Owing to lack of maintenance during the war, permanent way, locomotives and rolling stock had deteriorated to the point of danger. Railway managements were seeking every possible relief to be gained by rationalising the movement of coal traffic—concentrating it into train loads, eliminating “cross haulage”, and reducing the number of pits supplying individual consumers. Before the vesting date they had already worked in close touch with Regional Officers of the Ministry of Fuel and Power and local committees representing the colliery owners. Rational planning of coal movement by rail was, however, far from complete. Central planning of coastwise movement of coal was also necessary, and the Board decided to continue the Ministry of Fuel and Power's practice of drawing up periodical programmes of the coastal shipping needed to carry coal, to enable the Ministry of Transport to fit this requirement into the general plans for the movement of coastwise shipping.

THE ORGANISATION OF THE BOARD'S TRANSPORT BRANCH

308. The Board have therefore set up a Transport Branch within their Marketing Department. This Branch is represented at Headquarters, Divisions and the more important Areas. The transport organisation at Headquarters is in close touch with the railway Headquarters and holds regular meetings with the operating superintendents. At Divisions the Board's transport officers collaborate with the officials of the railway Divisional Headquarters responsible for traffic arrangements over wide areas. Transport officers at Area Headquarters provide links with district officers of the railways. Individual collieries continue to deal direct with local railway officials in day to day matters as in the past. The machinery for liaison between the coal industry and the railways is now therefore complete—in all the main coal producing areas of the country and at every “level” of organisation. Standing liaison committees, representing the Board and the railways, had been established by the end of the year in all the Board's Divisions.

COAL TRANSPORT DURING THE FUEL CRISIS AND THE SUMMER

309. The Board's transport organisation was severely tested from the start. Within a few weeks of the vesting date the country was in the throes of a crisis during which severe blizzards and storms (and later floods) multiplied the already serious difficulties with which the railways and other transport organisations had to contend. Throughout this period the railways and the Board acted jointly to keep coal moving and the pits winding. Without this co-operation many more pits would undoubtedly have stopped winding, and much more coal would have been lost.

310. During the summer the lessons of the winter crisis were reviewed. The situation of the railways was still deteriorating. The number of wagons out of traffic for repair was unduly large, even allowing for the normal seasonal increase during the summer. Matters were further complicated by the Five-Day Week Agreement. Coal output was now concentrated into a shorter period and the demand for wagons each day was therefore increased, with a "peak" demand on Fridays. The situation had to be watched carefully day by day, and stoppages were often averted by a matter of only a few hours. During the summer the Board continued their efforts to systematise the movement of coal traffic by avoiding cross hauls and the over-burdening of congested routes, and by concentrating on regular train loads and block loads. These arrangements involved extensive "switches" of allocations between one producing Division and another. They were often inconvenient both to the Board and to their customers, but were accepted as a necessary contribution to the improvement of the general transport situation. Important preparations were made for the transport of coal during the coming winter. These are dealt with in Chapter IX.

WAGON REPAIRS

311. One obvious contribution that the Board could make to ease the wagon shortage was to mobilise their own wagon repair shops to the greatest possible extent. The colliery companies had owned about 70 repair shops and depots, some 177,000 main line wagons, and 60,000 "internal user" wagons for use within the collieries themselves. The Board decided that their repair shops should concentrate on the repair of main line wagons at the expense of the others. They worked with the Ministry of Transport, the railways, and independent wagon repairing firms, to ensure that the country's resources for the repair of wagons were being used to the best advantage. Week-end working was instituted in many of the Board's repair shops. As things turned out, the number of wagons under or awaiting repair continued to increase until the end of September when there were 203,000 out of commission, or nearly 17 per cent of the country's total wagon fleet. After this, however, the measures taken began to have effect and the situation improved rapidly. By the end of the year the number out of action had been reduced to 160,000.

"SHORT WEIGHT" AND THE RETARING OF WAGONS

312. Another improvement which the Board were able to make during the year was to extend the practice of the "retaring" of wagons. Complaints of "short weight" have long been a problem in the industry. The Board have no control over coal in transit, nor over the manner in which it is handled on receipt by consumers, or bagged by merchants at their depots. One big cause of short weight is undoubtedly the poor condition of railway wagons which gives rise to losses in transit. As their contribution to the problem the Board can ensure that the operations over which they have control—the retaring and weighing of wagons before their despatch—are properly carried out. It is the Board's policy to retare wagons at collieries whenever possible. At many collieries this was the standard practice before nationalisation. At many others it was not,

and it will be necessary to install weighbridges and alter the layout of railway sidings. Progress is restricted by the shortage of new weighbridges, labour and materials. Widespread alterations to sidings are particularly needed in Scotland and in South Wales. In other Divisions the percentage of collieries which are retarding wagons varies between 70 per cent to 90 per cent. of the total number of collieries in the Division.

The Import of American and Polish Coal

313. The decision to import foreign coal was taken by the Government in May. The object was to assist the building up of stocks against a repetition of the fuel crisis in the winter. Responsibility for purchase, import and distribution was delegated to the Board. Coal was imported from U.S.A. and Poland

AMERICAN COAL

314. The Government applied to the European Coal Organisation for an allocation of coal during the third quarter of 1947. The Organisation recommended that the first 600,000 tons of American coal available for export above 9 million tons should be allocated to Britain. The allocation was made, and 608,000 tons were shipped (out-turn 605,930 tons) in 69 cargoes of approximately 9,000 tons each, between July and October, 1947

315 The coal was purchased f.o.b. American port of shipment, the Board making all arrangements for shipment to this country. Four British firms with long-established connections in America were appointed jointly as the Board's agents to buy the coal and charter the ships. The Marketing Member of the Board went to the United States at the end of May to discuss the operation with the American Government Agencies concerned and to make preliminary arrangements

316 The shipments consisted of 31 cargoes of Gas Coal and 38 cargoes of Industrial Coal. All cargoes were sampled and analysed upon shipment and again upon discharge in this country. While analyses were not guaranteed, approximate specifications were given, and the results showed that the shipments conformed fairly closely with the specifications. The f.o.b. prices of the coals varied considerably, according to quality and ports of shipment. The lowest was \$8 10 per ton for a cargo of Pennsylvania high volatile mine-run coal (Deep-mined and Strip) shipped at Philadelphia, while the highest was \$12 01 per ton for low volatile deep-mined bunker coal, loaded at New York. The average was \$10 98 per ton. The broad distribution of the coal, by ports and by industries, is shown in the following table

DISTRIBUTION OF AMERICAN COAL

Discharging Ports	Consumers							Totals
	Railways	Gas Works	Coke Ovens	Iron and Steel	Chemical and Allied Trades	Textile	Other Industries	
Clyde	17,792	746	10,836	941	—	—	40,611	70,926
Mersey	34,804	1,625	—	5,095	77,936	77,556	50,701	247,717
Bristol	—	—	—	—	—	—	—	—
Channel	9,013	6,876	919	60,799	3,908	—	9,005	90,520
Avonmouth	—	7,890	—	—	—	—	18,761	26,651
Plymouth	7,740	14,632	—	—	—	—	3,886	26,258
Southampton	—	6,881	—	—	—	—	1,924	8,805
Thames	—	32,800	—	—	—	—	29,284	62,084
Humber	8,568	—	11,213	5,198	—	—	24,446	49,425
Belfast	—	14,876	—	—	—	—	8,668	23,544
	77,917	86,326	22,968	72,033	81,844	77,556	187,286	605,930

317. British tonnage provided 50 vessels for the operation, American 9, and Canadian 4, with 6 Italian, Greek and Russian vessels completing the 69 shipments. Freight for all but the American and Canadian tonnage was payable in sterling. Freights varied between 42s 6d. and 57s. 6d per ton according to the loading ports in the United States, the lower rate being paid for the Northern Range and the higher rate for the Gulf ports

318. Normal distributive channels were employed for the disposal of the imports, and as far as possible the selling price at the port of import was related to the price of comparable British coal. This inevitably resulted in a heavy loss, which the Government decided should be borne by the Board for recovery in the price of home-produced coal. The total loss on U.S. coal shipments amounted to £1,389,306 or approximately 45s 10d per ton of the imported coal.

POLISH COAL

319. The Government's decision to import Polish coal (as part of the Anglo-Polish Trade Agreement concluded in May, 1947), was given effect by the conclusion of a twelve months' contract, from July, 1947, to June, 1948, for a quantity of approximately 240,000 metric tons, consisting of 40 per cent. Large, 30 per cent Nuts and 30 per cent Duff.

320. The equivalent sterling prices for the first period of the contract were as follows:—

Large Coal	75s. 9d. per metric ton f.o.b.
Nuts	65s 10d. „ „ „
Duff	39s 9d „ „ „

The contract was ended on 11th February, 1948, by mutual consent, and the balance outstanding was cancelled.

321. By 31st December, 1947, approximately 114,000 tons had been shipped, of which at that date approximately 108,000 tons had arrived and been discharged. Distribution of this quantity by ports, and disposal by consumers, are shown in the following statement.

DISTRIBUTION OF POLISH COAL

Discharging Ports	Consumers				Total
	Large Coal		Nuts and Duff		
	Railways	Domestic	Industry	Non-Industrial	
Thames and Medway	—	8,525	48,621	748	57,894
Grangemouth and Leith	34,169	—	—	—	34,169
Hull and Ipswich	—	—	11,806	1,938	13,744
Southampton	—	2,393	—	—	2,393
Total	34,169	10,918	60,427	2,686	108,200

The quality of the Polish coal shipments was satisfactory, judged both by the results of analysed samples and by reports from consumers.

322. The Polish coal, like the American coal, was purchased f o b. Transport to this country was therefore the responsibility of the Board, and Chartering Agents were appointed for this purpose.

323. Small vessels of between 2,000 and 4,000 tons are the most suitable for this trade, both for loading and discharging berths. During the first half of the contract, British tonnage of this size was fully engaged in coastal and other short-sea employment and, as a result, most of the vessels chartered have been Danish, Swedish and Polish. During the winter months, however, with the closing of many Baltic ports, more British tonnage was available and was chartered for the Polish coal shipments. Freight rates varied between 24s. 6d. and 35s. per ton according to the size of the vessels and the state of the freight market at the time of chartering.

324. The same policy over distribution channels and prices was adopted for Polish coal as for American coal. The total loss to 31st December on Polish coal shipments amounted to £215,615. The loss on Polish coal imported in January and February, 1948—£93,071—has also been taken into the 1947 accounts. The loss works out at 37s. 8d. a ton of the imported coal.

TOTAL LOSS ON IMPORTS

325. The total loss on the import of foreign coal—both American and Polish—amounted to £1,697,992, representing just over 2d. per ton on the saleable output of British coal during the whole of 1947.

CHAPTER VI

ANCILLARY ACTIVITIES

Carbonisation and Briquetting

326. On the vesting date the Board became the owners of 55 coking plants which had belonged to the colliery companies. Most of these coking plants are in the Northern, North-Eastern and South-Western Divisions, where most of the country's coking coal is found. They produce more than two-fifths of the national output of "hard" coke (that is, excluding coke produced by gas works).

327. Soon after the vesting date the Board started a thorough survey of all these coking plants. This survey was still being carried out at the end of the year, but enough information had been received to show that many of the ovens will have to be replaced or thoroughly repaired. The Board have inherited many of the country's oldest coke ovens, for example, one plant at Bankfoot, in the Northern Division, consists of 26 Simon-Carves French ovens built in 1882—still in relatively good condition and producing a special low ash coke. Many of these older ovens, however, have suffered severely from lack of maintenance during the war.

328. The Board have appointed a Director of Carbonisation in charge of a Carbonisation and Briquetting Branch at Headquarters. He is responsible both to the Production and Marketing Members of the Board. In each Division Carbonisation Officers have been appointed. They are concerned with the operation of coking plants in their Divisions, while Divisional Coke Marketing Officers have been appointed to sell the products of the coke ovens. The control of coke supplies is still in the hands of the Ministry of Fuel and Power's Coke Directorate, and the Board's Marketing Officers carry out the general policy laid down by the Ministry. The Board have formed a special committee consisting of seven of their members, and presided over by the Chairman, to deal with the special problems of carbonisation.

COKE SUPPLIES IN 1947

329. Throughout the year the demand for coke exceeded the supply. For most of the year, because of the general shortage of coal, the Ministry of Fuel and Power restricted the amount that might be supplied to coke ovens. The Board's ovens, like the rest, had not enough coal to operate at full capacity. The urgent need for more steel caused an increased demand from the biggest consumers of coke—the iron and steel industries. In view of the increased output of coal towards the end of the year the restrictions were removed and coke ovens then received enough coal to enable them to operate at full capacity. This made it possible for the coking industry to supply more coke—mainly to the iron and steel industry. By the end of the year the supply of coke to blast furnaces was much improved, but supplies to foundries and other consumers including domestic consumers, were still short. Hard coke for blast furnaces and foundries is likely to remain scarce so long as the steel industry aims at producing an annual output of anything more than 14,000,000 ingot tons of steel—until more and better coke ovens can be built.

330. There is close co-operation between the Board and the gas industry over the disposal of coke. In particular, the shortage of coke which began last winter has been eased by the interchange of gas coke and hard coke. To begin with, hard coke from the Board's coke ovens went to supply the consumers of gas coke when gas coke was short. Towards the end of the year, however, when hard coke was particularly needed by the iron and steel industry, the gas industry supplied gas coke to some consumers who had previously been receiving hard coke, thus releasing more hard coke for the blast furnaces.

331. Exports of coke during the year were negligible, but the Board look forward to the time when the important overseas markets, particularly in Scandinavia, built up by the former owners of the coking plants take British coke once again.

THE BRITISH COKING INDUSTRY ASSOCIATION

332. The iron and steel industry, like the Board's coke ovens, produces about two-fifths of the national output of hard coke, leaving only a fifth in the hands of independent undertakings. In order to co-operate with the other coke producers, the Board have joined the British Coking Industry Association. Apart from establishing a means for discussion on matters of common interest, this Association provides part of the funds of the British Coke Research Association (the rest of the funds being found by the Department of Industrial and Scientific Research). The Board provide the Headquarters staff of both the British Coking Industry Association and the British Coke Research Association, the other partners in these Associations refunding to the Board their share of the costs. The British Coke Research Association works with the research organisations of the gas and iron and steel industries. It maintains a research station at Sheffield and laboratories at Newcastle-on-Tyne. It also possesses a test oven plant of a design unique in this country at Pontypridd in South Wales. During the year three representatives of the National Coal Board joined a team of six technicians sent by the British Coke Research Association to America to investigate coking practice and research there.

COKE OVEN DEVELOPMENT PLANS

333. The demand for coke from the iron and steel industry is heavy and increasing. So is the demand from domestic consumers—which is likely to expand over a long period as the recommendations of the Domestic Fuel Policy Report (the Simon Report) are carried out. Coke ovens are also well

sued to contribute to local "gas grid" systems. For these reasons the Board wish to press forward with their development plans as quickly as possible. These plans will have to be co-ordinated with those of the iron and steel and gas industries.

334. The Board's plans involve heavy capital expenditure. They estimate that even to maintain their present output of coke they must build about 175 new coke ovens a year for many years to come. Many more will be needed if the Board are to share in the general expansion of the coke industry. Major constructional work at coking plants to a value of £2,500,000 was put in hand by the Board during the year, including a new coking plant at Nantgarw, extra capacity at Coedely (both in the South-Western Division) and Grassmoor (East Midlands), and replacements at Tondy (South-Western) and Hardwick (East Midlands). Development work begun by the former owners was completed at Altham in the North-Western Division, and Norwood in the Northern Division.

335. The Board are concerned about the high cost of new carbonisation plant and the delay in obtaining constructional materials. The capital costs of building new coking plants have trebled since 1939. Under present-day conditions it takes about four years to build a coke oven carbonising 7,000 tons a week. The main cause of delay is the shortage of refractory materials.

BY-PRODUCTS

336. The Board produce large amounts of by-products from their coking plants—for example, about a sixth of the tar, a third of the benzole and a fifth of the sulphate of ammonia produced in the country. Derivatives of tar and benzole provide in turn important raw materials for the chemical, pharmaceutical, plastics, paint and dye industries, while sulphate of ammonia is much in demand as a fertiliser. The Board's coke ovens also produce some 8 per cent of the country's town gas.

337. In addition to coke ovens, the Board acquired on the vesting date tar distillation plants at Caerphilly (South-Western Division), Dumbreck (Scottish), Thrislington, Bankfoot, Tudhoe and Lambton (Northern), Cragglestone, Dalton Main, Old Silkstone (North Eastern) and Harworth (East Midlands). The plant at Caerphilly is a modern pipe-still installation which handled 33,000 tons of tar during 1947. This tar came not only from coke ovens belonging to the Board but also from privately-owned ovens and from various gas works in South Wales. From their distillation plants the Board sold during the year much pitch, tar oil, road tar, tar fuel oil and naphthalene. The Board joined the Coal Tar Research Association, the other members of which are the British Association of Coke Oven Tar Producers, the British Gas Council and the Association of Tar Distillers.

338. The Board also produced about 24 million gallons of crude benzole during 1947, some four-fifths of which they refined themselves. From the crude benzole they produced motor benzole, toluole, xylene and naphthalene. The Board disposed of most of their benzole to the National Benzole Company, an organisation created by the British producers of benzole which has co-operated with the Government since the beginning of the war through the Petroleum Board. The Board contribute to the National Benzole Association, the research organisation of the benzole industry.

339. Most of the Board's output of sulphate of ammonia was marketed during the year through the Sulphate of Ammonia Federation. The demand for this product is particularly keen and, in view of the Government's drive to increase agricultural output, is likely to become keener.

340. In addition to the production from tar and benzole of important raw materials for industry, the Board also manufacture proprietary articles such as liquid waterproofers and adhesives ("Synthaprufe"), rust-resisting paint ("Presomet") and wood preservatives ("Presotim"). They are carrying out a complete survey of all their by-products with a view to their development. They have inherited, however, a number of long-term contracts, and they will not have a completely free hand to dispose of their tar and benzole for some years to come.

341. The Board also produced from their coke ovens some 35,000,000,000 cu. ft. of gas for town use during the year—about 8 per cent. of the town gas sold in the country. The sale of this gas is mainly concentrated in the industrial regions of Durham, the Midlands and South Wales. Important industrial centres such as Newcastle-on-Tyne, Sunderland, West Hartlepool, Sheffield, Chesterfield, Mansfield, Rotherham and Accrington are mainly dependent on the Board for their gas, while Darlington, Durham, Derby and other large towns are also big consumers of gas from the Board's coking plants.

BRIQUETTING AND MANUFACTURED FUEL PLANTS

342. The Board acquired 20 coal briquetting and manufactured fuel plants from colliery companies. During the year they also bought a further 10 briquetting plants from the Ministry of Fuel and Power for £50,000. These latter plants were set up by the Ministry as a war-time expedient to make domestic fuel from slurry and anthracite duff. They ran at a loss. Of the total of 30 plants owned by the Board, at the end of 1947, 10 are in the South-Western Division. During 1947 the 30 plants produced 703,711 tons of briquettes and 851,776 tons of ovoids. While coal is short these plants undoubtedly serve a useful purpose in providing fuel manufactured in some cases from coals which would otherwise be unsaleable. Some of these plants—particularly in South Wales—make high grade briquettes which find a ready market both at home and abroad for firing locomotives and for industrial uses. Mention should be made of the "Phurnacite" plant in South Wales, which manufactures a special type of carbonised ovoid, there is a strong demand for this fuel, which is designed for heat storage cookers and is also suitable for domestic hot water installations. The Board intend to develop the output as rapidly as possible.

Brickworks

343. A number of colliery companies operated brickworks. These were mainly used to make common building bricks from the discard brought up from the pits with the coal, though a number also made high grade building bricks and firebricks. Where these brickworks were situated in colliery yards or were otherwise closely associated with collieries, it would have been impracticable to place them under separate ownership. In these cases, therefore, the Board exercised an option to acquire them under the Nationalisation Act. Altogether the Board own 83 brickworks and two pipe works, employing 2,943 people and producing about 10 per cent. of the country's total output of bricks. In 1947 they produced 420,000,000 bricks, of which 94,500,000 were used in the collieries themselves—the rest being sold in competition with other brick producers. The Board's local organisation for supervising the production and sale of bricks varies in different parts of the country. In some Divisions, Divisional General Managers have been appointed to supervise brickworks. In Scotland—where the Board is the biggest single producer of bricks—a Brickworks Superintendent has been appointed for each Area.

Estates

344. The number, size and variety of the assets which the Coal Industry Nationalisation Act transferred to the Board have made them owners and managers of property on a large scale. Many of the colliery companies employed estate managers and these have transferred to the service of the Board. The staffs of the Coal Commission in London and in the provinces were also transferred, bringing with them specialised experience. The day-to-day work of property management was carried out, for the most part, in the Divisions and in the Areas. Divisional and Area estates managers were appointed, generally from among the transferred staff.

SURFACE ESTATES

345. Apart from normal estate management work, surveying, purchase and sale of land and buildings, collection and payment of rents, repair and maintenance of property (in one Division 10,000 cases of repairs to houses, farms and buildings were dealt with in the year), and rating assessments, there were a number of special problems which faced the Board. These are described below.

346. Most miners' houses which had been owned by the colliery companies passed to the Board under the options procedure. There were a number of miners' houses, however, which were not directly owned by colliery companies or by subsidiary companies and these did not pass to the Board under the terms of the Coal Industry Nationalisation Act. These houses were owned by Housing Associations which had been set up by colliery companies to obtain the benefit of certain public loans and subsidies available under the various Acts passed after the first world war. To take one example, an undertaking known as the Industrial Housing Association, Limited, had been formed by 14 colliery companies to build miners' houses. At the vesting date the undertaking owned 29 building estates, comprising 10,000 houses, together with other buildings and land.

347. Before nationalisation an understanding had been reached between the Mining Association of Great Britain, representing the colliery companies, and the Ministry of Fuel and Power that in the spirit of the Coal Industry Nationalisation Act the property of housing associations of this kind would be acquired by the Board if satisfactory terms could be arranged. The colliery companies who supported the housing associations could reasonably claim that they should not continue to be associated with the work of managing the housing estates, seeing that the miners would no longer be their employees, but the Board's. The Board accordingly opened negotiations with the Industrial Housing Association, Limited, and other housing associations to acquire the freehold interests of the property. The total cost will be about £2,500,000, of which £1,800,000 was paid in 1947. It was also necessary for the Board to arrange with the Ministry of Health and the owners for the benefits of the subsidies to continue in force.

348. The Board need to own real estate for much the same reasons as their predecessors. Like them, the Board need land and buildings to carry on colliery operations, and they need land to enable them to extend those operations in the future, they may also require it for subsidiary purposes, such as welfare, recreation and housing. Finally, on account of subsidence damage caused by the working of the underlying coal, they may find, as their predecessors did, that it is more economical to own the surface property than to have to meet repeated claims for damage. The Board's ownership of property will not be static. As the working of coal progresses, new areas of surface land will be required, whilst other areas previously held may no longer be needed.

349. In fact, during 1947 very little land was acquired by the Board apart from land required for operational purposes or similar purposes (for example, office buildings). One estate, consisting of 637 acres was, however, acquired in Leicestershire. It included 55 miners' cottages. It was bought as a protection against claims for subsidence damage. Another estate, consisting of 2,000 acres of farmland and timber, together with a hall, farm, houses and cottages was purchased in County Durham, again as a protection against subsidence claims.

350. There were no big sales of property during 1947, but some was disposed of to local and statutory authorities, sometimes through the exercise by those authorities of compulsory powers

351. Among other property which has been transferred to the Board are farmlands, farming stock and other agricultural assets which formerly belonged to the colliery companies. Most of these farms were held by the colliery companies to avoid subsidence claims. Generally, they were run by tenants, but some colliery companies farmed the land directly. The statements below show the total number and acreage of the farms taken over by the Board and the number and acreage of those which were being directly run by colliery companies.

FARMS TAKEN OVER BY THE BOARD

Division	Freehold		Lease or Tenancy		Total	
	Number	Acreage	Number	Acreage	Number	Acreage
(1) <i>England and Wales</i>						
Northern .	424	57,086	314	46,150	738	103,236
North Eastern	126	13,298	19	2,813	145	16,111
North Western	99	3,898	37	2,397	136	6,295
East Midlands	93	8,642	11	921	104	9,563
West Midlands	116	8,835	32	2,784	148	11,619
South Western	154	15,775	108	15,253	262	31,028
South Eastern	7	732	—	—	7	732
Total England and Wales	1,019	108,266	521	70,318	1,540	178,584
(2) <i>Scotland</i> . . .	216	37,424	50	9,141	266	46,565
Total	1,235	145,690	571	79,459	1,806	225,149

FARMS BEING RUN DIRECTLY

Division	Freehold		Lease or Tenancy		Total	
	Number	Acreage	Number	Acreage	Number	Acreage
(1) <i>England and Wales</i>						
Northern .	19	5,783	24	5,488	43	11,271
North Eastern	13	1,913	4	453	17	2,366
North Western	5	124	3	141	8	265
East Midlands	8	996	—	—	8	996
West Midlands	6	452	5	892	11	1,344
South Western	11	1,321	18	2,749	29	4,070
South Eastern	—	—	—	—	—	—
Total England and Wales	62	10,589	54	9,723	116	20,312
(2) <i>Scotland</i> . . .	1	481	7	1,357	8	1,838
Total	63	11,070	61	11,080	124	22,150

352. The largest acreage of farmland is held in the Northern and South-Western Divisions where the incidence of surface damage from coal working is heaviest. In Scotland most of the acreage is held in Fifeshire and Ayrshire, where new developments in the coalfields are taking place.

353. There may, in some cases, be a conflict of interest between plentiful food and cheap coal. Towards the end of 1947 the Board entered into discussions with the Ministry of Agriculture and Fisheries and other Government Departments, in order to devise a satisfactory procedure (within the context of the Agriculture Act, 1947) for resolving any conflicts of interest which may arise.

MINERAL ESTATES

354. Once the royalties in underground coal were privately owned Sometimes a colliery and the coal worked from it were owned by the same person, more often than not they were in separate ownership. The Coal Act of 1938 transferred the property in all underground coal to the Coal Commission and ownership of the coal was everywhere divorced from ownership of the means of getting it. The Coal Industry Nationalisation Act, 1946, for the first time brought all the collieries and all the underground coal into single ownership.

355. Although in theory the Board have a legal right to work their own coal, in practice they cannot work it without withdrawing support from the surface. Sometimes they have not the right to do so. In order to acquire or supplement rights to withdraw support from surface land, it is often necessary to negotiate with surface owners, in particular with railway companies and canal authorities. In cases of disagreement, application has to be made to the Railway and Canal Commission, who are empowered to make orders permitting the mining of coal, or specifying conditions under which coal may be worked.

356. Underground working has to be organised so as to cause the minimum damage on the surface. Land and buildings above coal seams must be surveyed to ascertain their condition before subsidence, and geological considerations have to be taken into account. If the Board are liable to the surface owner for damage caused by subsidence, the liabilities likely to be incurred through extraction of the coal can thus be assessed. It is then necessary to decide what buildings should be supported to avoid unjustifiable risks, what size of coal pillars should be left unworked, and how far it may be possible to modify a programme of mining development to minimise the risk of damage (for example, by rearranging a "panel" so as to work the whole of the coal supporting a building at one operation instead of risking a deformation of the surface by working part at one time and part at another).

357. In the past, development of surface land was not co-ordinated with the development of coal seams beneath. Much coal was accordingly sterilised. The risk of causing damage to the buildings above might be such as to make it uneconomical to work the coal. The Town and Country Planning Act of 1947 (and the companion Act for Scotland) will make co-ordinated development possible, and the Board will endeavour to secure, in collaboration with the Planning Authorities, that surface development does not take place unnecessarily on land overlying workable coal. If surface development has to take place, the Board will endeavour to see that it is carried out in such a way that as little damage as possible will be caused by subsidence.

358. As in the past, many claims were handled during 1947 for compensation on account of subsidence damage caused by mining. The Coal Industry Nationalisation Act, 1946, made the Board liable not only to pay compensation for damage caused by their own working but also to indemnify colliery

companies against claims for damage caused before nationalisation which fell due for discharge after nationalisation. In some cases, compensation claims can be minimised by taking early preventive measures and even before nationalisation the colliery companies were invited to carry out such work at the Board's expense so as to minimise subsequent claims.

Small Mines

359. As described in the Board's 1946 Report there were before nationalisation some 480 small mines, that is, where the number of workpeople employed below ground was not likely "greatly to exceed 30", and they contributed about 1 per cent. of the total coal production of Great Britain. Under the Coal Industry Nationalisation Act, licences were issued enabling most of the former owners of the mines to continue to operate them. It would not at that time have been economical or administratively convenient for the Board to operate these small and scattered units of production directly. The financial provisions of the licences provided for the payment of sums, varying from district to district, to and by the firms operating small mines, these were designed to reproduce the effects of the Coal Charges Account (*see* paragraph 391) which was wound up on the vesting date.

360. During the year both costs and realisations of the small mines increased through causes beyond the control of the operators. The Five-Day Week Agreement and the increase in the wages of the lower-paid mineworkers, settled between the Board and the National Union of Mineworkers and applied by the terms of the licences to the small operators, substantially increased costs. The increase in the price of coal to compensate for the effects of the Five-Day Week was delayed. The Board therefore agreed to vary the financial provisions of the licences so as to allow at once for the increase in costs which occurred. When, however, the price of coal was raised on 1st September, 1947, the provisions of the licences were again adjusted to offset the effect of the price increase.

361. The price increase due on 1st January, 1948, was approximately equal to the increase in costs and it was not necessary to make any further adjustment in the financial provisions of the licences.

362. In many instances the Board perform services for the small operators, and then they charge an appropriate fee. One instance is the selling of coal, more especially in those districts where before nationalisation the disposal of coal was handled centrally by statutory selling schemes.

363. The plant and equipment of the small mines operating on 1st January, 1947, vested in the Board, and they were leased back to the operators at a rental. The licences provide that in certain circumstances capital expenditure on small mines which are the property of the Board will be reimbursed, and accordingly schemes of capital development fell to be considered by the Divisional Boards.

364. There were a number of applications during the year for licences to operate new small mines. New mines could be opened if the Divisional Board were satisfied that they would not reduce the production at the Board's mines, for example by drawing off scarce labour.

365. Apart from the licensing of small coal mines, it was also necessary, under the terms of the Coal Industry Nationalisation Act, to issue licences to the owners of mines mainly producing other minerals, like fireclay or ganister, but where some coal was produced. Some 70 licences were granted.

CHAPTER VII

SCIENCE IN THE INDUSTRY

366. Natural sciences like physics, chemistry and geology find daily application in the winning and utilisation of coal. The human sciences and medicine in particular can promote the safety and well-being of the men who serve the coal industry. In preparing to take over the industry, the Board planned to apply scientific method and scientific knowledge freely and widely—underground at the coal face and on the roadways, on the colliery surface in coal preparation and in the coke ovens and by-product plants. In each Division a Chief Scientist was appointed to be responsible for the day-to-day scientific activities of the Division and to be the scientific adviser to the Divisional Board. Each Area was to have its Chief Scientist and each was to have a laboratory. Scientific research was organised as a common service for the industry as a whole.

367. Before nationalisation only a few colliery companies were properly equipped for day-to-day scientific control, still fewer were equipped to conduct research. Some, however, had good scientific organisations and the staffs and laboratories taken over from them formed a nucleus for the development of the Board's scientific activities. Some research also was being conducted on behalf of the colliery owners by the British Colliery Owners Research Association, an off-shoot of the Mining Association of Great Britain, and before nationalisation the staff and the functions of this Association were transferred to the Board outside the Coal Industry Nationalisation Act. Even so, the scientific inheritance of the Board was meagre.

368. During 1947, the Board's scientific organisation was being built up, some laboratories and equipment were acquired and some staff were recruited; but shortage of scientists, laboratories and equipment set a limit to what could be achieved during the year. Priority was given to the setting up of an organisation which would provide a day-to-day scientific control service covering the whole range of the industry's activities.

Day-to-Day Scientific Control

369. Day-to-day scientific control operates at the collieries. The Area Chief Scientists and the Divisional Chief Scientists are responsible for carrying it out. Scientific control at collieries is mainly concerned with safety and control of quality.

SAFETY

370. Regulations made under the Coal Mines Act, 1911, require that samples of the mine-dust in underground roadways shall be taken at regular intervals, to make sure that they contain enough non-combustible matter for safety. Over a million samples are analysed each year. Other Regulations make it compulsory to undertake systematic tests of atmospheric conditions underground to establish that the percentage of fire-damp (methane gas) is kept below the danger level. New Regulations made during 1947 increased the number and frequency of the samples and imposed a strain on the slender resources of the industry for gas analysis. Experiments were put in train to devise speedier methods of testing the samples, so as to free men for other work. For example, extensive trials were made both in the laboratory and underground of new instruments for the rapid detection of methane. These are being continued in the hope that improved instruments, which first have to be approved by the Minister, can shortly be brought into use.

371. During the year, new Regulations were also made to improve lighting underground. One of the new requirements was the periodic testing of miners' lamps. This meant that the Board had to undertake "photometric" testing. Some of the new apparatus was delivered and put in use before the end of the year, but it will be some time before a complete "photometric" service is installed throughout the coalfields.

372. Other work on safety fell to the Board's scientists serving in Divisions and Areas. In some parts of the country, for instance, there was a standard procedure for the control of underground heating, so that any tendency towards dangerous over-heating at any point could be detected quickly and remedies applied. Local knowledge of this kind is now disseminated throughout the coalfields and applied for the benefit of the industry as a whole. In some Divisions, mobile gas analysis units were provided, for use in emergencies such as explosions or underground fires.

QUALITY CONTROL

373. It would not be possible to give customers an adequate service without a running check on the qualities of the coals mined and on the processes of cleaning and preparation for market. Otherwise the Board could not achieve consistent standards of quality, price their coals fairly or adjust processes of production and preparation so as to make the most of the coals mined. Before nationalisation only about 25 per cent. of all the coal produced was regularly sampled and analysed. Even in the best equipped Division no more than about 60 per cent. of the output was sampled regularly, and the remainder only occasionally, or not at all. Other parts of the country were much worse off, and in one Division a quality control service was available only at 12 collieries.

374. Collieries which previously had no scientific control are now served from laboratories at neighbouring collieries. As a result of this and other improvisations, the industry now has a better quality control service than it had before nationalisation, but it will be some time before a comprehensive service can be provided for each colliery. Testing of representative samples of the marketed grades is however now carried out throughout the industry.

375. A quality control service was improvised at short notice for sampling and analysing exported coal. There will eventually be a permanent quality control organisation at the key ports to inspect cargoes before shipment and to take samples where necessary. This organisation will work together with the established consultants who operate on behalf of shipowners and foreign buyers. During 1947 imports also had to be tested. More than 90 per cent. of the imported American and Polish coal was sampled and analysed.

376. Altogether the Board market over 6,000 named coals, and a rapid chemical survey of each was begun in 1947. The survey was nearly complete by the end of the year. The results will help the Board to prepare the new price structure which will link price with quality. Other investigations for this purpose were carried out. There was, for example a detailed laboratory examination of the gas coals produced in each coalfield. Before a new price structure can be introduced, coal must be classified, named and graded according to a standard system, to replace varying local practices which are confusing alike to buyer and seller. The classification of all grades of coal according to size, involves another heavy task of sampling and analysis of representative coals; although progress was made during 1947, the task was not completed during the year.

377. The methods of quality control in particular are applied to the cleaning and preparation of coal for sale. At some modern washeries there was before nationalisation a routine analytical service, testing regularly raw coal, products and discards. This service is being extended to all the Board's washeries as staff become available. The objects are to ensure consistency in the quality of the marketed coals and to get the maximum quantity of saleable coal out of the washeries. As described in Chapter IV, the Board intend to instal many new coal preparation plants, partly to replace old and worn-out equipment and partly to treat much of the coal now being sold in its raw state. Before the specification of the new plants could be settled, there had to be a detailed account of the "screen analysis" and "washability" of the run-of-mine coal to be treated. For this purpose many seam investigations had to be made. In a typical case, a seam investigation meant taking a sample of about 15 tons, screening it into five grades, separating each grade into six specific gravity classes, crushing and grinding each of the 30 classified samples and determining the ash and sulphur contents. In some Areas coals were examined in this way for the first time.

The Coal Survey

378. To survey the nation's resources of coal there is a national organisation known as the Coal Survey. Formerly it was attached to the Department of Scientific and Industrial Research, but in August, 1947, it was transferred to the Board, who undertook that its identity as a national organisation would be preserved. Its links with other research organisations, in particular the Geological Survey and the Fuel Research Station (both of the Department of Scientific and Industrial Research), will also be maintained. The Coal Survey retains its responsibility for advising the Ministry of Fuel and Power on the suitability of seams for opencast mining. The work is of direct interest to the Board because they market opencast coal for the Ministry. Indirectly it is useful to them in planning their own activities in drift mining.

379. During the war the work of the Survey was curtailed and when the transfer took place the organisation was preparing to resume its duties on a normal peace-time scale. There were several re-housing problems on hand. The laboratories at Birmingham, Nottingham and Sheffield were being moved to new premises. The Glasgow laboratory was inadequately housed, while at Leeds and Newcastle leases were running out. Within a year or so all the laboratories will be housed in suitable accommodation.

380. The dispersed activities of the Coal Survey are controlled centrally from the Board's Headquarters but it works in collaboration with the Divisional scientific organisation. The cost of this work, previously borne by the Exchequer, is now met from the revenues of the Board.

Scientific Research

381. Scientific research in the coal industry is of three main kinds. First there is laboratory research on physical and chemical problems arising out of coalmining and coal utilisation. Then there is technical research leading to the development of new instruments, methods, processes and products. Finally there is research on problems of health and welfare.

382. Much of the work will continue to be carried out by other bodies, for example, universities, hospitals and co-operative research associations. The work which is done by the Board will mainly be concentrated in a single research establishment. A site for this establishment was found in 1947 but was not

acquired until 1948. The Board's small research staff departed little from inherited lines of work. The staff consisted mainly of teams taken over with their laboratories and equipment from the British Colliery Owners' Research Association and one large colliery company.

LABORATORY RESEARCH

383. The fundamental laboratory work carried out by the Board in 1947 was concerned mainly with dust and illumination in coal mines, both important to the health and efficiency of underground workers. An apparatus was needed for the rapid measurement of dust concentrations in mine air to avoid recourse to laboratory analysis, which could never be completely satisfactory because of the time lag between taking a sample and analysing it. A simple apparatus was produced and was undergoing trials at the end of the year. With this it will be possible to make a rapid survey of the comparative dustiness of the pits throughout the country. Work on the effect of mechanised processes on dustiness in mines was also continued. New devices for dust suppression were tested. Water is often used to suppress dust at the coalface, but in some mines too much water may damage the roadways and make it harder to clean the coal. Experiments were conducted with various kinds of foam and with wetting agents other than water.

384. Experiments were made in underground illumination, in particular fluorescent lighting. A portable photo-electric photometer was developed for this work, and as described in Chapter IV the first fluorescent lighting was installed at the Chislet Colliery.

385. When the central research establishment is set up priority will be given to the laboratory study of the following :—

- (i) new methods of sampling and size analysis of mine dusts and investigations into their nature and formation,
- (ii) new instruments for use in the industry, especially new automatic detectors—and if possible continuous recorders—of the noxious gases, carbon monoxide and methane,
- (iii) the surface properties of coal, a better knowledge of which will contribute to improvements in dust suppression, coal preparation, briquetting and carbonisation.

TECHNICAL RESEARCH

386. During the year several new processes for the manufacture of briquettes were investigated. One process would enable carbonised briquettes to be manufactured from "caking" coals. Another would enable large briquettes to be made in a double roll press. A new process based on the principle of "pneumatic froth flotation" was developed for the cleaning of fine dirty coal. Slurry which can be burnt is recovered from washery effluents by adding what is known as "flocculating agents". A new method of producing one of these agents cheaply was evolved.

HEALTH RESEARCH

387. Much research on health in coal mines is already carried out by other bodies—the Medical Research Council, the universities and the hospitals. The Board will continue to draw upon the research work undertaken by those bodies and hope that they will direct their work along lines which promise solutions of the Board's special problems. The Board's scientific organisation

must, however, be in a position to advise the Board on the nature of the human problems encountered, their effects and possible remedies, and be able to investigate for themselves matters which are not catered for by outside bodies. During 1947 the systems of recording accidents in the industry were reviewed and a new scheme worked out in consultation with the Ministry of Fuel and Power and the Department of Experimental Psychology at Cambridge University. A preliminary study was made of data on miners' dermatitis.

OTHER RESEARCH

388. Research work will not be confined to the central research establishment and full use will be made of the resources of the Board's scientific control organisation based on Divisions and Areas, and of the Coal Survey. Moreover, the Board participate in four associations which undertake co-operative research on behalf of their members, namely the British Coal Utilisation Research Association, the British Coke Research Association, the Coal Tar Research Association and the National Benzole Association.

CHAPTER VIII

FINANCE

The Financial Background

389. In carrying out the operational tasks described in earlier chapters the Board had to pay constant attention to the financial effects of their policies. The Board's Annual Accounts, at the end of this Report, show the financial results of the year, and these are reviewed in Chapter XI below. The purpose of this chapter is to explain the financial background of the Board's operations and to describe how the Board's financial business is conducted.

390. The Board are enjoined by Statute to make their revenue sufficient to meet outgoings over an average of good years and bad. This means, broadly speaking, that the Board must operate as a business on business lines. But, with or without this statutory prescription, control of costs in the coal industry would be all important. It is not only that the consumers of coal would demand no less. In the long run the nation's ability to export coal in quantity will depend on price; and as coal prices enter into the costs of production of other British industries, their capacity to export also depends on cheap coal.

391. The Board's borrowing powers other than on capital account are limited to £10,000,000. So, if the Board should make a trading loss in any year, they must cover it mainly from such resources as they possess. The industry must now stand on its own feet and there can be no subsidy from the Exchequer. In the immediate past the Coal Charges Account, operated by the Ministry of Fuel and Power during the war years, though in principle a balancing account through which the low-cost coalfields financed the high-cost coalfields, was in deficit to the extent of £27,500,000 when the coal mines passed into national ownership, and the deficit was written off—representing a subsidy from the Exchequer. Again, many services were rendered to the former owners by the Government—recruitment, coal survey, supplies, statistics, hostels, canteens, medical centres and so on—which the Board now have to carry out at their own expense.

392. But if the Board must function as an autonomous business, they have obligations as a public body which no business has. In all their financial dealings, the Board must conform with the best commercial practice. They

also have a special responsibility as trustees for the public. They must see that their financial transactions are consistent with their powers and duties laid down by Statute.

393. The Board are, moreover, called upon to undertake many activities in the public interest involving them in loss. They maintain whole coalfields in operation which incur losses because the national interest demands that the coal shall be produced. They finance the private operation of small mines in high-cost districts for the same reason. A commercial enterprise is bound to adapt its policy so as to make profits, but profits for their own sake cannot be an object of the Board's policy. Normally, if costs are reduced the benefit passes to the employees of the industry or the consumers. The Board must seek every means of reducing costs not so as to produce profits but so as to benefit the community. They will seek to price their various products not merely to yield a given revenue but so as to influence the demand of consumers away from products which are scarce and cost much to produce in favour of those which are plentiful and can be produced cheaply.

Provision of Capital and Service of Debts

394. The Government provide the finance for compensating the former owners as well as the finance for most of the Board's capital expenditure. The Board must re-imburse the Government for the capital, and pay them interest.

COMPENSATION TO FORMER OWNERS

395. Compensation for the main assets of collieries has been fixed by an independent tribunal at £164,660,000. This is a "global sum" for the industry as a whole. The division of this sum first among the coalfield districts, and secondly among individual colliery companies, will be the task of Valuation Boards appointed by the Minister of Fuel and Power under the Coal Industry Nationalisation Act. The colliery companies will receive Government stock in satisfaction of their claims.

396. The global sum represents only part of the Board's capital liabilities arising out of compensation to the former owners. The Valuation Boards will determine separately compensation for (a) subsidiary assets, e.g. coke ovens, brickworks, (b) interests under freehold leases, compensation for "severance" etc., (c) stocks of products and stores. The colliery companies will receive Government Stock for (a) and (b) and cash for (c); and the Board will repay to the Government the capital and interest.

397. Again, the Coal Commission's interest in all the unworked coal in Great Britain has passed to the Board. The former owners of the coal royalties who were dispossessed by the Coal Act of 1938 received Coal Commission Stock by way of compensation. The Treasury have issued new stock in exchange for Coal Commission Stock to a value of £78,457,008 17s 10d bearing interest at the rate of 2½ per cent per annum, and the Board are liable to the Minister for the repayment of this capital with interest.

398. Finally, the Minister of Fuel and Power undertook to refund to colliery concerns capital expenditure incurred by them between 1st August, 1945, and the vesting day, to encourage capital developments in the coal industry before nationalisation. This undertaking was written into the Coal Industry Nationalisation Act. The Board are liable to refund to the Minister the amount involved, roughly £18 million in all. Though the assets in most cases had already been in use, the Board were obliged to bear the full cost without any allowance for depreciation and they were charged with interest on the amount of the refunds for a period in 1946 before they took over the assets.

THE BOARD'S BORROWING POWERS

399. One of the duties of the Board is to undertake a technical re-organisation of the industry involving them in heavy capital expenditure on development and reconstruction. The Coal Industry Nationalisation Act provides that the Minister may advance to the Board up to £150 million in the first five years for capital expenditure and working capital. At the conclusion of the five-year period the Minister may only advance such amounts as Parliament may later determine.

400. There remain the Board's temporary borrowing powers. The Board may borrow up to £10,000,000 by overdraft or otherwise. Short-term borrowing requires the consent of the Minister, which may be given in the form of a general authority. In fact the Minister has given the Board general authority to borrow up to this limit.

INTERIM INCOME

401. It will be some time before the amount of compensation payable to colliery companies is finally settled and compensation stock can be issued. The Coal Industry Nationalisation Act provides that during 1947 and 1948 the former owners are entitled to receive "interim income" in substitution of interest on the outstanding amounts of compensation. Interim income is generally half of the profits earned before nationalisation. This means that the former owners will receive something more than a gilt-edged interest rate on compensation unpaid. The Board have to refund to the Minister the amount incurred by the Government for "interim income". During 1947 and 1948 the annual charge is estimated at £12,400,000.

REPAYMENTS TO THE GOVERNMENT AND RATES OF INTEREST

402. The Board have therefore become or will become liable to the Minister of Fuel and Power for the following capital debts.—

Description	Amount
1 Compensation for Collieries	Amount of stock to be issued in satisfaction of the global sum of £164,660,000
2 Compensation for Subsidiary Assets	Amount of stock to be issued in satisfaction of the compensation determined by District Valuation Boards
3 Compensation for — (a) Stocks of Products, Stores, etc (b) Interests under a former freeholder's lease (c) Other compensation payable in cash	Amount of cash compensation to be determined by District Valuation Boards. The colliery owners have claimed £39,383,189 for (a). The amounts to be claimed for (b) and (c) are not yet known
4 Compensation for Severance (S 21 (2) of the Act)	Amounts of stock to be issued in satisfaction of compensation to be determined by District Valuation Boards
5 Capital Outlay Refunds	Amounts of refunds, including interest (£99,010) to 31st December, 1946
6 Treasury Stock issued in exchange for Coal Commission Stock	£78,457,089
7 Advances for Working Capital	Actual requirements.
8 Capital Advances other than for Working Capital	Actual requirements not exceeding (together with Item 7 above) £150 millions in five years from 12th July, 1946, of which £41,085,000 had been advanced up to 31st December, 1947
9 Expenses of Issue of Stock	Amount attributable to the Board's requirements

403. The sums are to be repaid in accordance with Directions issued by the Minister, and a copy of a letter dated 30th December, 1947, from the Secretary of the Ministry of Fuel and Power conveying the Minister's Directions to the Board is given at Appendix VI.

404. The Minister has directed that repayments of long-term debts should be made over a period of 50 years in the form of "terminable annuities"—fixed annual payments of which the interest portion will decrease and the capital portion will increase year by year. Where compensation to the previous owners takes the form of Government Stock, the rate of interest payable by the Board will be the rate of interest which the stock bears. Where compensation is paid in cash by the Government, the rate of interest due from the Board will be the rate at which the Government borrow the money to make the payment. Where money is advanced by the Minister to the Board, the interest is normally to be the gilt-edged interest rate at the time of borrowing.

405. The gilt-edged interest rate to be paid by the Board has been taken at $2\frac{1}{2}$ per cent. per annum for advances during 1946 and 1947.

406. The Board's capital and interest obligations under Items 1, 2, 3 and 4 above will depend on the state of the market when claims to compensation are met. For example, the global sum representing compensation payable for collieries (Item 1) has been fixed at £164,660,000. It will be some years before all the individual claims of colliery companies are met and blocks of stock may be issued at varying times either at a premium or a discount. The Board's capital liability, which is for the amount of the stock and not its market value, may therefore not equal £164,660,000 exactly. Moreover, the rate of interest payable by the Board will depend on the interest rate applicable when the stock is issued.

RESERVE FUND

407. The Coal Industry Nationalisation Act provides for a Reserve Fund to be established by the Board. The management of the Fund is a matter for the Board, subject to any Directions which the Minister may issue. The Reserve Fund of the Coal Commission, amounting to £3,113,256, was transferred to the Board and formed the nucleus of the Board's Fund. It was not possible to make any allocation to the Reserve Fund for the year 1947, but the Board consider that the Fund should be increased substantially at the earliest opportunity.

THE CAPITAL STRUCTURE

408. In short, the Board have no fixed capital and do not issue stock. Their financial requirements are satisfied by the Government, on whom they draw from time to time within the limits imposed by the Coal Industry Nationalisation Act. The Board do not normally carry any surplus funds, which is an advantage, but they have no effective control over the timing or the terms of capital issues. The Government provide the Board's capital but, unlike shareholders in a limited company, have no proprietary rights. The Board's interest obligations have to be met in good years or bad irrespective of profits. This is in contrast to limited companies, which are largely capitalised by shares or stock and only pay dividends if there is a surplus to distribute. Because the compensation payable for some of the assets vesting in the Board has not yet been fixed, the initial capitalisation of the Board cannot be determined. It is likely to be about £400,000,000 with annual interest charges of between £10,000,000 and £12,000,000.

Financial Organisation

409. The work of the Headquarters finance staff is organised under three headings Accounts (cash and banking, financial accounts, cost accounts and accounts organisation), General Finance (control of income and expenditure on revenue account, control of capital expenditure, taxation and special financial problems) and Internal Audit. The Headquarters Finance Staff handle national financial problems and negotiations, provide a financial and accounting service to the Board, determine standard accounting and financial arrangements throughout the industry, and provide guidance and advice on finance to Divisional Boards.

410. At Divisional Headquarters, the finance work is organised similarly under a Finance Director who is a member of the Divisional Board. The Divisional Board as a whole are responsible to the National Board for the finances of the industry within their coalfield, but if there is any irreconcilable difference of opinion between the Finance Director and his colleagues, the Finance Director can ask for the matter to be referred to the National Board for a decision.

411. In practice there is a two-way correspondence between Divisional Finance Directors and the Director-General of Finance at Headquarters on all matters concerned with the day to day execution of financial and accounting policy. Each Divisional Finance Director is assisted by a Chief Accountant, and a Chief Finance Officer with specialist assistants. There is also a Divisional Internal Auditor who is responsible to the Divisional Finance Director, but who has direct access to the Chief Internal Auditor at Headquarters. The Divisional Finance Director controls and co-ordinates the financial work of the Areas and provides a financial and accounting service to the Divisional Board.

412. In each Area there is an Area Chief Accountant with specialist assistants. Originally he reported direct to the Divisional Finance Director, but now he is on the staff of the Area General Manager (see Chapter IX) and stands in the same relation to the Divisional Finance Director as a Divisional Finance Director does to the Director General of Finance at National Headquarters. There is an Area Internal Auditor responsible to the Divisional Internal Auditor. The Areas, with an average capital investment of about £8,000,000 and an average annual expenditure exceeding £10,000,000, are the main accounting units of the industry. Below the Area Chief Accountant there are in most cases "Group Accountants" who control offices responsible for detailed work on wages and stores accounts.

413. Most of the Board's Finance officials were appointed from within the industry and the organisation described above could only be built up gradually, as the staff could be released from the colliery offices where they were previously employed. By the end of 1947 the organisation was complete.

Initial Financial Problems

414. The Board did not take over from their predecessors any cash or any banking accounts. When the industry changed hands, the Board had to see that some 700,000 mineworkers got their pay packets as usual. There were countless other payments and countless receipts which had to be handled from the start and properly accounted for. Cash had to be provided for the immediate needs of every colliery unit. Nearly 1,000 banking accounts had to be opened and arrangements made for the operation of the accounts and the authorisation of signatories.

415. At every colliery unit complete sets of books and accounts had to be provided, with instructions on the way they were to be compiled. All the financial apparatus to enable the Board to operate commercially and account for every transaction was in fact ready by 1st January, 1947

416. In the early days of nationalisation, however, there were a number of special difficulties. In the past, the accounting arrangements of collieries were often organised in small offices. The Board's intention was to form centralised accounting offices as soon as possible for groups of collieries which would employ up-to-date accounting methods. Shortage of accommodation and equipment delayed the setting up of the new offices, but by the end of the year most of them were in operation.

417. After 1st January 1947 the accounting and financial staffs transferring to the Board's service had responsibilities towards their former employers. Under the Coal Industry Nationalisation Act the Board had to allow them to help their former employers to wind up their affairs and claim compensation. So, after the vesting date, the finance staffs not only had to carry out their normal duties for the Board, they had to complete the accounts of the colliery companies, take a leading part in preparing the colliery companies' Statements of Interests and inventories (which would be the basis of their claim to compensation), and settle the apportionment of liabilities between the Board and the companies.

418. It was difficult for the Board to account satisfactorily for their own property because the Statements of Interests and inventories of stocks, listing the assets which transferred to the Board, were not presented by the colliery companies until some time after the vesting date. The Board had to do what they could to establish the numbers and values of the stocks of products and of the movable plant and equipment which they had taken over. Assets which might or might not pass to the Board under the options procedure presented the greatest difficulty. In many instances it was not until late in 1947 that the final ownership of these assets was determined, although under the Coal Industry Nationalisation Act, transactions since 1st January 1947 involving the optional assets were to be treated as though they were transactions of the Board. The valuation of the assets by the District Valuation Boards—in the case of assets not covered by the "global sum" these will represent the price the Board would indirectly have to pay for them—will not be completed for some time. This means that the Board had to use provisional values in completing their accounts.

419. Another difficulty was that a number of colliery companies kept their chief financial officials to handle the companies' claims for compensation. In fact the chief financial officials of only fifteen out of the fifty biggest colliery companies transferred to the Board. Thus, the Board had to appoint some persons without experience of the coal industry and to promote others within the industry to posts of far greater responsibility than they had carried before.

420. The task of operating and nationalising the industry imposed a double burden on all the staffs of the industry and this burden perhaps bore more heavily on the finance staffs than on any other.

Banking

421. New banking arrangements had to be devised and operated from 1st January, 1947. The task was to enable cash to be withdrawn for wages and other purposes at 550 points up and down the country, and to enable cash and cheques received to be lodged and cleared through banking accounts in

such a way as to keep the balance of funds held in banks to a minimum. The Board received the whole-hearted co-operation and assistance of the Bank of England, the English Clearing Banks, and the Scottish Banks.

422. The Board's main Banking Account is held with the Bank of England. Transactions on this Account are limited to —

- (i) transfers to and from the Minister of Fuel and Power ;
- (ii) transfers to and from central accounts at Clearing Banks and at the Scottish Banks (described below) ,
- (iii) some special receipts accruing to National Coal Board Headquarters.

423. The account is operated so as to keep the balance within a maximum and a minimum. If the balance rises above the maximum on any day the surplus is transferred to the Paymaster General on behalf of the Minister, thus reducing the Board's debt to the Minister ; if the balance falls below the minimum the deficit is claimed from the Paymaster General, provided that the additional amount borrowed from the Minister is in accordance with the Board's borrowing powers under the Coal Industry Nationalisation Act.

424. Central Banking Accounts were opened with each Clearing Bank. The total book balances are kept within a maximum of £6,000,000 and a minimum of £4,000,000. The balances are needed to provide large sums in cash throughout the country for the Board's weekly wage payments, but the Central Banking Accounts (most of which are in London) are not debited until several days after the cash has been withdrawn. Hence, a proportion of the book balances are not effective balances from the point of view of the Banks

425. The main banking business of the Board is transacted through Area Banking Accounts which were allocated among the Clearing Banks and the Scottish Banks broadly in the same proportions as they shared the banking business of the coal industry before nationalisation. Most of the normal trading transactions with the Board are dealt with through these Area Banking Accounts. All balances on Area Accounts, debit or credit, are cleared daily to the Board's Central Account with the bank concerned, except in the case of the five Scottish Area Accounts which operate as though they were Central Accounts. There are 48 Area Banking Accounts corresponding to the Board's Management Areas.

426. Headquarters and Divisional Banking Accounts (nine in all) which are largely withdrawal accounts, operate on the same principle as the Central Banking Accounts, the maximum balance in each case being £2,000.

427. Immediately after nationalisation it was not possible to concentrate the Board's accounting arrangements at the Area offices and therefore banking accounts for Lodgement and Drawing had to be operated by the various Coal Board Units, which carried on activities formerly carried on by colliery undertakings. Bank balances on the Unit Lodgement Account were cleared daily to Area Banking Accounts and thence to Central Banking Accounts. Unit Drawing Accounts at the banks, on the other hand, were kept in funds by transfers as necessary from Area Banking Accounts. Some suppliers' bills were paid from the Unit Drawing Accounts. Withdrawals of cash for wages, however, were from the outset charged direct to the Board's Area Banking Accounts.

428 The process of concentrating the Board's management at Areas continued throughout 1947. By December, 82 per cent. of Lodgements were being made direct to Area Banking Accounts, and the remaining Unit Lodgement Accounts at banks were to be closed early in 1948. The Unit Drawing

Accounts at banks were similarly closed as the Board's Area accounting organisations developed, and in most cases they ceased to operate during 1947.

429. The remuneration of the Clearing Banks (bank charges and interest on balances) was settled on an experimental basis in 1947 and was to be reviewed in 1948 in the light of the experience gained

Accounts

430. The Coal Industry Nationalisation Act requires the Board to keep proper accounts and records: each year they must prepare a statement of accounts for publication, the statement must conform with the best commercial standards and be in such form as the Minister may direct. The obligation to conform with the *best* commercial practice sets a high standard for the Board's accounting arrangements. The Board also publish quarterly statements of proceeds and costs of collieries similar to those which were published by the Minister of Fuel and Power in the past in connection with the Coal Charges Account. The accounting information published about the coal industry is perhaps more extensive than that published for any other industry.

ACCOUNTING PRINCIPLES

431. At the outset a number of general questions had to be settled. One question was, in what form should the final accounts be presented? The form of revenue accounts as exemplified by the best commercial practice has been undergoing a change over recent years. Emphasis has been moving from the single profit and loss account analysed according to types of income and expenditure towards a series of profit and loss accounts analysed to show the results of each kind of activity or process. The Board decided that their accounting arrangements must make it possible to present accounts in both these ways.

432. Another question was, how far should the accounts maintained at different parts of the Board's organisation be standardised? The Board did not wish to pursue standardisation for its own sake. The important thing was to see that everywhere the accounting arrangements were such as to produce the same kind of information. How the information was produced could be left largely to local initiative. The diversity of the activities in which the Board are engaged and the variation in the sizes of the Board's operating units, make complete standardisation impracticable. A mechanised system of accounting, for instance, might be suitable for a large unit but might be uneconomical for a small one. Where, however, economies or greater efficiency could be achieved by standardised methods, the Board's aim was to introduce them gradually so as to cause as little disturbance as possible in the existing arrangements.

433. Yet another question was where the main accounts of the industry should be maintained. The Board decided that their accounting arrangements should be decentralised to a large extent. Accordingly, detailed records of wages and stores would be maintained in individual collieries or at offices dealing with groups of collieries, but all main accounts would be brought together as soon as possible at Area offices. The headquarters of the Divisional Boards would only be concerned in the compiling of accounts showing aggregate figures for the whole of their coalfields, while the National Coal Board headquarters in London would only be concerned with compiling accounts showing the results of all the coalfields, together with the accounts for the National headquarters itself.

434. Finally, the Board had to balance the advantage of making the accounts so comprehensive as to give every piece of accounting information conceivably required, against the need for making their arrangements as simple and as cheap as possible.

THE TRANSITION TO AREA ACCOUNTS

435 When these general questions had been settled, the National Coal Board were able to inform the Divisional Boards what accounting figures would be required from 1st January, 1947, from Divisions, Areas and Coal Board Units and the basis on which they should be compiled. Local offices then had the task of adapting their accounting arrangements to provide the required information with the minimum of disturbance. Only in exceptional cases was it necessary to introduce major changes on 1st January.

436 In many collieries there was no satisfactory system of stores accounting. In the long run, the advantages of standardising stores accounting will prove overwhelming, but a standard stores accounting system throughout the industry could not be introduced immediately. It had to wait until proper accommodation and equipment could be provided.

437. Some standardisation in wages records is also desirable. The form of the wages records in colliery offices depended on the methods adopted for making initial records underground and on the surface, and these were so many and so various that it was not feasible immediately to make them uniform.

438 Because few Area offices were working on 1st January, 1947, to start with most of the accounts were maintained in the offices of the colliery undertakings which had been made into Coal Board Units. This presented difficulties. Often the office where the accounts were kept was the headquarters for collieries, coke ovens and other ancillary plants situated in more than one of the Board's Areas, and the accounts of the company's office had to be subdivided so as to show separately the activities carried on in each Area. There were also difficulties about composite undertakings, which operated iron and steel works as well as collieries. The accounts had to be split up and this could not be done satisfactorily until it was known which of the optionable assets would remain with the parent company and which would transfer to the Board. The apportionment of accommodation, equipment and staff between the activities remaining with the company and the activities transferring to the Board brought its own problems. When the time came to transfer the main accounts to Area offices, there were again a number of problems of staffing and organisation to be overcome. To take one example, staff transfers were not always easy to arrange because of the housing shortage.

439. By the end of the year, the transition to Area accounting had been largely accomplished. Despite all difficulties, detailed monthly profit and loss accounts and detailed weekly wage costs analysed on a uniform basis were produced as from 1st January, 1947, for every colliery. To begin with, monthly profit and loss accounts for the main ancillary activities of the Board continued to be prepared on the lines adopted by the former owners, but after 1st July, 1947, these, too, were analysed in a uniform way.

DEVELOPING THE ACCOUNTING SYSTEM

440. Having organised the accounts of the industry mainly on the basis of past practice to meet the Board's minimum needs, the next step was to see how they could be adapted to give the best possible service. Priority was given to the improvement of unsatisfactory systems, particularly stores systems. Where

at two neighbouring collieries the practice at one was sound and at the other was unsound, the sound practice was extended to cover both. By the end of the year uniformity of wages and stores systems had been obtained in many Areas.

441. Guidance was needed on accounting methods in all Divisions and Areas. Experience gained at one point of the Board's organisation should be applied for the benefit of the whole industry. For this purpose, an Organising Accountant was appointed at the Board's National Headquarters

442. During 1947 the main task was to raise the average standard of accounting throughout the industry to a reasonable minimum. Research was also carried out into the Board's major accounting problems with the object of devising new techniques to get results more quickly and economically. Special attention is being paid to the processes of making and recording wages payments, they absorb much of the industry's accounting effort, and probably offer the best opportunity for introducing economies

443. The Board had to consider how far to introduce or extend mechanised systems of accounting. Mechanisation of accounts in the past had not been taken very far in the coal industry, although at one colliery office or another almost every type of mechanised system was to be found. Accounting machinery is scarce, and even when it can be obtained it often has to be imported from "hard currency" countries. The Board used such machinery as was available. They also did what they could to eliminate unsatisfactory features in accounting systems they took over by adapting manual methods wherever these were adequate

Audit

444. The Auditors of the Board's Accounts are appointed by the Minister of Fuel and Power. As soon as the Accounts have been audited the Board have to send a copy of the Accounts to the Minister together with a copy of any Report made by the Auditors. The Minister has to lay a copy of the Accounts and of the Auditors' Report before each House of Parliament. All this is provided in the Coal Industry Nationalisation Act. The Minister appointed Messrs. Thomson McLintock and Co. as Auditors to the Board for the period from 12th July, 1946, to 31st December, 1947

445. In recent years a number of large business organisations have adopted what is known as "internal audit", that is, they have a staff of experienced auditors who carry out detailed checking in collaboration with outside auditors. Some of the largest concerns in the coal industry had internal audit staffs who were mainly engaged on the checking of wages

446. It would be necessary in any case to develop a staff to review systems of internal check and to test the efficiency of accounting and other techniques and this work can most conveniently be associated with audit work. Moreover, the detailed checking involved in audit can be carried out more economically by an internal audit staff than by outside auditors

447. The Board accordingly decided to organise an internal audit staff. The whole of the arrangements were settled in conjunction with the outside auditors and approved by them. The programmes of internal audit were settled in consultation with the outside auditors and all reports and working papers of the internal auditors were available to them. The outside auditors verify that the internal auditors are in fact carrying out an effective check

448. A small internal audit staff is attached to each Area, under the control of an Area Internal Auditor who, although attached to the staff of the Area Chief Accountant, reports direct to the Divisional Chief Internal Auditor and

thus has the necessary measure of independence. Similarly, the Divisional Chief Internal Auditor has the right to report direct to the Board's Chief Internal Auditor at Headquarters, who in turn has the right to report direct to the Board.

449 The nucleus of the internal audit staff was found from those already engaged in this work in the coal industry. New appointments have been made from the staffs of firms of accountants, mainly those with large practices in the coal industry, and from other staffs with extensive experience of coal industry accounts. On 31st December, 1947, there were 198 internal auditors in the coal industry, of whom 51 held professional qualifications.

450 The internal audit staff was built up gradually during the year and for some part of the year it was necessary to employ professional firms, usually the auditors to the former colliery owners, to carry out internal audit work. Eighty-four firms were thus employed for varying periods. The scope of the internal audit is much wider than the usual professional audit. Nevertheless, the total cost of the internal audit staff of the Board together with the fees payable to professional firms of accountants, including the auditors appointed by the Minister, is less than the audit fees paid by the coal industry before nationalisation.

451 During the first year the work of the internal audit section was confined to audit checking and to special work on such matters as the verification of stocks vesting in the Board and other non-recurring problems. The Board will develop accounting systems which provide their own checks without reference to audit. Then the work of the internal auditors will be applied mainly to seeing that the systems of internal check operate satisfactorily.

Cost Control

452 Before nationalisation the problem of controlling costs presented itself in a different manner. The industry consisted mainly of small undertakings of which the proprietors, or directors representing the proprietors, could themselves effectively supervise all day to day transactions. Even the larger companies in the coal industry were not so big or so complex that the directors could not exercise a fairly direct control of financial affairs, and there were special difficulties—and these difficulties remain—in the way of applying simple cost control methods, for example, the wide variations in conditions from colliery to colliery and an overriding need for safety in the mines. For these reasons the development of costing techniques had not kept pace with those in some other industries composed of larger units in which efficiency in costs is obtained not so much by the personal intervention of directors in daily transactions but by the automatic operation of systems of cost control which they have installed.

453 When the coal industry was nationalised emphasis was transferred from the making of profits as such to the control of costs. This brought many problems, not least of which was how to ensure effective financial control without impairing local initiative and sense of responsibility. It also brought opportunities for the development of accounting and costing techniques for the measurement of efficiency which are not normally available to an industry operated under private ownership.

454. During 1947 more coal was urgently needed. The Board accordingly operated many uneconomic collieries, in spite of the heavy cost. As a matter of deliberate policy they introduced costly reforms for the benefit of the workers of the industry (the five-day week, increases in wages of lower-paid workers, etc.)

which they believed to be desirable in themselves and were designed to improve productivity and increase the labour force. Moreover, standards of equipment and working conditions in some collieries were not consistent with the status of the National Coal Board as a public employer, and much expenditure was inevitable to begin with

455 Within the limits of the policies adopted for increasing the production of coal the Board paid the greatest attention to controlling costs, both capital costs and revenue costs. The first provision made by the Board was that decisions involving finance required the concurrence of a representative of the Finance Department. Thus, as already explained, if the Finance Director of a Divisional Board should take exception to a decision of his Board involving finance the matter can be referred to the National Coal Board. Similarly, the Area Chief Accountant may refer to the Divisional Board a difference on financial matters which may have arisen at the Area. In practice, there have been few occasions when references of this kind to a higher authority have occurred.

456. Although the circumstances of a nationalised industry differ from those of a concern under private ownership, well-tried methods of cost control, such as are in use by large commercial organisations, can readily be applied. The Board issued guidance to their staffs throughout the coalfields on the methods of control of expenditure which have been found successful in industry, and it is the responsibility of the Divisional Boards to ensure that these methods are in operation everywhere. Instructions were also issued defining the officials authorised to incur expenditure of every type. For routine expenditure "on revenue account" authority was originally given to Controllers of Coal Board Units. Later, when the Board's Area organisation was built up, this authority was assumed by Area General Managers. More important items of "revenue" expenditure were authorised by Divisional Boards. Subject to national policy as laid down from time to time by the National Coal Board, Divisional Boards have complete authority to incur revenue expenditure within their Divisions, normally they delegate this power to Area General Managers, subject to general guidance on policy.

457. Information about costs in a standard form is prepared weekly and monthly for use by those officials whose duty it is to control costs. The methods are being improved as rapidly as possible and, in planning future developments, the Board have in mind the importance of systems of cost control as opposed to cost ascertainment. The development of standard costs presents peculiar difficulties in an "extractive" industry with a large number of units operating under conditions which vary from place to place and from time to time. New systems of cost control cannot be introduced without the full understanding of the technical and other staff whose achievements are to be tested; but during the first year the Board's responsible officials in the coalfields were already taxed to the utmost in carrying on the day to day operations of the industry in circumstances of great difficulty and in organising it on a new basis.

458. The prime responsibility for reviewing and curbing costs lies with the Area General Manager who reports monthly on the costs of his Area to the Divisional Board. The Divisional Boards submit monthly appreciations of their costs to National Headquarters, where the trend of costs is reviewed and reported to a committee of the National Coal Board.

459. There remains capital expenditure. All capital projects are subjected to close financial examination and criticism before they are authorised, and estimates of the expenditure and of the financial results are compared. Minor

capital schemes are authorised by the Area General Manager. Others are authorised by Divisional Boards, subject to the approval of the National Coal Board in the case of schemes involving an expenditure of more than £100,000 on collieries or of £25,000 on ancillary undertakings

CHAPTER IX

THE WINTER 1947-48

460. By the third week in September most of the collieries had finished their holidays. The recruiting campaign had increased the industry's manpower by more than 25,000 workers in the first six months of the year, and by the end of the summer many of these workers had been trained and were settling down to their new tasks. The Board's technical measures to increase output—described in Chapter IV—were also beginning to show results. In the autumn a further important step was taken to increase output—an increase in the number of hours worked each week.

Extension of Working Hours

461. In view of the country's increasing economic difficulties, the Government had appealed to the basic industries to work longer hours in order to increase output. They suggested to the National Coal Board and the National Union of Mineworkers that while the emergency lasted workers in the coal industry should work an extra half-hour a day. The National Union of Mineworkers thought that a better result would be achieved by working Saturday shifts, while keeping to the principle of the Five-Day Week Agreement. They suggested that all workers in the industry should work at least two Saturday shifts in every four, at overtime rates of pay. The Board felt doubtful about this suggestion, which virtually meant returning to the state of affairs before the introduction of the five-day week, with overtime rates for Saturday work. They therefore proposed that all the conditions of the five-day week should be carried out in full, and that the men should voluntarily work an extra shift a week at normal rates of pay—all other conditions of the arrangement to be settled locally. Considerable discussion followed between the Government, the Union and the Board. In the main the Government favoured the working of an extra half-hour a day in the mines; the Union preferred the introduction of Saturday working at overtime rates, claiming that the extra half-hour would not provide much extra output and would interfere with the cycle of operations at the pits; while the Board were particularly concerned that whatever arrangement was adopted should not prejudice the measures to increase output contained in the Five-Day Week Agreement. The Government, however, left the decision to the Board.

462. Agreement was reached between the Board and the Union in October. In this Agreement, Divisional Boards and Area Executives of the Union were invited to arrange either an extra half-hour a day, or as many extra Saturday shifts as possible—each Division and Area Executive being free to choose between the two methods or to leave the choice to be made at collieries. It was expressly stated in the Agreement that the working of overtime must not interfere in any way with the cycle of operations on the five normal shifts or with the full carrying out of the Five-Day Week Agreement. The extra work was to be paid for at overtime rates, and the Agreement was to continue in force until 30th April, 1948. An Order in Council [S.R. and O. No. 2405 of 1947] was made under the Coal Mines Regulations Act, 1908, temporarily permitting the hours of work below ground to be increased from 7½ hours plus "one winding time" to 8 hours plus "one winding time".

463. Miners in Northumberland and those at nearly half of the collieries in Durham decided to work the extra half-hour a day. Most of the miners throughout the rest of the coalfields decided to work on Saturdays—in some parts every Saturday, and in other parts every other Saturday. In Scotland it was decided to stagger the extra working in order to reduce the demand for railway wagons. Half of the collieries therefore worked on each alternate Saturday. Altogether, by the end of December the Agreement had resulted in an extra output of about 2 million tons of coal, or about 5 per cent. of the total output during the last two months of the year. The effect of the Agreement varied to some extent in the different Divisions, as the following table shows —

RESULTS OF EXTENSION OF HOURS AGREEMENT IN THE 10 WEEKS
ENDED 3RD JANUARY, 1948

Division	Estimated Extra Output due to			Per Cent of Total Output
	Saturday Working	Extra Half-hour	Total	
	'000 tons	'000 tons	'000 tons	
Scottish .. .	354 7	—	354 7	7 64
Northern .. .	171 7	163 6	335 3	4 53
North Eastern .. .	416 1	2 1	418 2	5 34
North Western .. .	86 2	4 3	90 5	3 40
East Midlands .. .	326 7	—	326 7	4 59
West Midlands .. .	174 2	0 3	174 5	5 10
South Western .. .	246 1	2·9	249 0	5 23
South Eastern .. .	—	—	—	—
Great Britain .. .	1,775 7	173 2	1,948 9	5 12

Drift Mining

464 Two further measures to increase output were developed during the later part of the year. One of these was the extension of drift mining, and the other was the recruitment of volunteer workers from Europe.

465. The development of drift mining had already begun to have an effect on output by the end of the year, and will have an increasing effect over the next few years. Drift mining is a method of mining coal from seams lying near the surface. It is used where opencast mining is impracticable because the "overburden" is too thick to be economically removed by mechanical shovels. The seam is reached by a tunnel, and the coal is then mined by normal underground methods. As there is no need to sink a shaft or put in the elaborate installation needed at deep mines, drift mines are very economical. The output per man shift is usually high—sometimes as much as three tons—compared with an average of about one ton in deep mines. In the past most drift mines have been small and have been worked by relatively primitive methods.

466. About half of the new drift mines are to be in Scotland where conditions are particularly suitable and where this type of mining has already proved successful. The latest American equipment is being used, and the haulage system is simple and efficient. In several of the Scottish drift mines, self-discharging mine cars are to be used—carrying 2 tons of coal and hauled by diesel or electric locomotives. Some of these mines are already in full production.

At Benarty, where underground locomotives are in use, output per man shift is already as much as 3 tons. By the end of 1948, 26 drift mines should be in production in Scotland with a total annual output of 1,322,000 tons. By 1951, the output from Scottish drift mines may well be more than 3 million tons.

467. Drift mining is also being developed in other parts of the country, though on a smaller scale. In the Northern Division, where it is already fairly extensively employed, two new drifts have been opened, and one which was closed some years ago has been re-opened. In the North Eastern Division one new drift mine has been opened, three others are in hand, and a number of sites are being prospected. In the West Midlands a new mine began production during the year, a second was in process of being developed and two more are planned. In the East Midlands investigations were carried out with a view to developing new drift mines. In the North Western Division, one new drift mine is working and a number of others are projected. In the South Western Division one new drift has been opened and another is being considered.

468. Altogether, plans have been made to have some 60 to 70 drift mines in operation by the end of 1950. Each of these mines should produce anything from about 300 to 1,100 tons per day, and the total extra output from this source should amount to about 4 million tons of coal a year—an important increment to the Board's output.

Recruitment of European Volunteer Workers

469 The number of Polish workers recruited into the industry declined considerably towards the end of the year, as suitable volunteers grew scarcer and other industries were allowed to recruit them. The scheme had proved so successful, however, that in September the Board arranged with the Ministry of Labour and National Service to take on volunteer workers from Europe to help provide the new manpower needed by the industry in 1948. This arrangement was made with the full agreement of the National Union of Mineworkers. The volunteer workers are of many different nationalities and come direct from Europe many of them can speak no English at all when they arrive. They are recruited for the Board by the Ministry of Labour and National Service, mainly from camps of displaced persons in Europe. On arrival in this country they are usually sent to the Ministry of Labour Holding Camp at Full Sutton, where they are medically examined by National Coal Board doctors and interviewed by a small panel which decides whether or not they are likely to be suitable as mineworkers. They are then posted to one of several education centres where they learn English and facts about the British way of life, the period they spend at these Education Centres averages six weeks, but depends on the aptitude of the individuals. They are examined when they finish the course, and are only passed out if they reach the necessary standard. They are then normally posted to one of the Board's four Adult Residential Training Centres, where they undergo three weeks' preliminary training in the usual way. After this training they are posted to collieries.

470 By the end of 1947, 1,230 had been recruited (in addition to the 6,000 Poles already mentioned) and 688 were actually at work in collieries.

Increase in Wages of the Lower Paid Workers

471 The increase in output which took place towards the end of the year was not achieved without extra cost. The agreement with the National Union of Mineworkers for the extension of working hours had increased the Board's costs. A more important increase in costs came, however, from an increase in the wages of the lower paid workers in the industry.

472. On 10th October, the National Union of Mineworkers applied to the Board for an increase in the wages of surface and underground workers. The Union explained that they had hoped to review the "wages structure" of the industry as a whole. This was, however, a complicated problem which would take a long time to resolve, and in the meantime insistent claims for an immediate increase in wages were being made. Many miners were dissatisfied with their present rates of pay, and there was a danger that the discontent might get out of hand. The Union claimed that the Porter Award of 1944 had been designed to establish a certain relationship between the wages of miners and the wages of workers in other industries. Since then the wages of other industrial workers had increased and the present claim was intended to restore the relationship established in 1944. The Union also claimed that higher wages were necessary to help recruitment and to prevent workers leaving coal-mining to seek jobs in other industries.

473. The Union accordingly applied for an increase of £1 a week in the national minimum wage previously fixed by the Porter Award of 1944 at £5 a week for underground workers and £4 10s. 0d. for surface workers. The Union also asked for an increase of 20 per cent. in the minimum rates of wages paid to youths, an increase of 3s. 4d. a shift in all district day wage rates, and finally they asked for piece-rates to be increased in order to maintain the relative position of the different classes of workers.

474. The Board in reply stated that they were not prepared to grant any general increases, either in piece-rates or day rates. The industry was not paying its way. They agreed, however, that there was some justification for an increase in the wages of the lower paid workers but they held that the increase asked for by the Union was much more than was justified by comparison with other industries—particularly in view of the shorter hours now being worked in the mines.

475. Further negotiations followed and agreement was reached on 14th November. The minimum wage for adult underground workers was increased by 15s. a week, making a new minimum of £5 15s. 0d., and the minimum wage of surface workers was increased by 10s., making a new minimum of £5. In addition, men paid by the day were to have their wages increased by 2s. 6d. a shift (underground) or 1s. 8d. (surface). Men earning less than £6 15s. 0d. (underground) or £6 5s. 0d. (surface) would get the increases in full or as much of the increases as would bring their earnings to these "ceilings". Men whose earnings were already above £6 15s. 0d. a week (underground) or £6 5s. 0d. (surface) would not be eligible for the increases. Thus, these increases, like the increase in the minimum wage, benefited only the lower paid workers. The wages of youths were also increased. The increases were to be retrospective from the first week in November. One of the Union's claims had been that the Board should review the wages of Craftsmen. The Board agreed to make a joint enquiry with the Union to define the classes of Craftsmen, to grade them according to skill, and to determine the wages for the different grades. This investigation did not take place until 1948. The Board further agreed to review the wages of two other classes—Shotfirers and Winding Enginemmen—after dealing with Craftsmen.

The Winter Coal Budget

476. Towards the end of the summer, the Government worked out plans for the distribution of coal during the "coal winter"—that is November to April. Just as the prospect of the introduction of the five-day week had made it hard to forecast the summer output, the likelihood that working hours would be increased made it hard to estimate the winter output. In the event, it was estimated at 97 million tons of deep-mined coal and 4½ million tons of opencast

over the 26 weeks of the winter—in total about 3½ millions more than output in the same period of the previous year. The Government's aim was that industry should get all the coal it needed to play its part in the production and export drive and that, if necessary, other consumers would have to go short. Allocations to industry were therefore to be based on the estimated needs of individual firms.

477. As soon as the Government's general policy was known, the Programming Authorities (staffed by the Board) examined the needs of each of the 12,000 large firms consuming more than 250 tons a year, and made a forecast of their consumption during the winter on the assumption that they received all the coal they needed. These estimates were then discussed and agreed with the Regional Officers of Government departments concerned. Firms were grouped into 140 trade categories. The Government's Fuel Allocations Committee (which representatives of the Board attended) decided what percentage of the estimated consumption should be supplied to the firms in each trade category to enable them to play their part in the production and export drive.

478. Earlier in the year, when the summer budget was announced, the Government had given a pledge that firms which managed to pile up large stocks during the summer would not be penalised when the winter allocations were worked out. This pledge applied to individual consumers, but in deciding how much each industry was to receive during the winter, the Fuel Allocations Committee took into account the average level of stocks in the industry as a whole. In addition to these allocations, a "reserve" of 1½ million tons was set aside to be placed at the disposal of the Regional Boards for Industry. From this reserve the Regional Boards could make supplementary allocations. These supplementary allocations were intended to help firms which (through no fault of their own) had been unable to accumulate sufficient stocks by the beginning of the winter, and to meet the special needs of firms which were increasing their output or exports. The reserve would not be a physical stock but simply an unallocated portion of the weekly output. If the Regional Boards did not allocate it to individual firms it would be distributed as evenly as possible to consumers willing and able to accept it. Taking into account the reserve, the forecast saving of coal by conversion to oil burning and the 2½ weeks' supply which firms could reasonably be expected to take from stock during the winter, it was estimated that industry as a whole would have all the coal it needed. The iron and steel industry was treated throughout as a special case. Firms in this industry were given individually their full needs, but by agreement with the industry itself individual stocks were taken into account and firms were not allowed to claim supplementary allocations from the reserve.

479. In October the Government announced their winter budget. They assumed that during the winter about 8½ million tons could be drawn from the stocks accumulated during the summer, and they maintained the general embargo on exports and the restrictions on bunkering at British ports which had been in force since the fuel crisis in February. The main items of the winter budget may be summarised as follows.—

COAL BUDGET—NOVEMBER 1947—APRIL 1948

	Million Tons		Million Tons
Inland consumption	108.2	Stocks at beginning of winter	15.25
Less saving by Oil Conversion	1.0	Deep mined production	97.0
		Opencast production	4.25
	107.2		
Bunkers and Exports ..	2.8		
Target stocks at end of winter	6.5		
Total ..	116.5		116.5

A small amount of Polish coal (about 20,000 tons a month) had also to be taken into account. To enable industry to get the coal it needed railway passenger services were again to be restricted; gas works and power stations were to consume about one million tons less than they asked for, though slightly more than they consumed in the previous winter. No alteration was made in the "maximum permitted quantities" allowed to domestic consumers. Coke ovens were to receive about 11 per cent. more in order to meet the growing demand for coke from the iron and steel industry.

480. Throughout the work of preparing the winter plans, officials of the Board advised the Minister of Fuel and Power and the Fuel Allocations Committee. Before the budget was announced the Board had carried out a "dress rehearsal" to confirm that the scheme for industry was workable, taking into account the demand for the different grades of coal, and the transport hauls implied in the scheme. A "shadow" allocation was given to each firm and allotted to a particular Division for supply. The results showed that the scheme was practicable. As the Government's final decisions were not announced until the first week in October, there were little more than three weeks left in which to put them into effect. The winter allocations had to be worked out in a hurry, and the scheme threw a heavy burden on the Programming Authorities and the Coal Supplies Officers. In the three weeks individual allocations were made to more than 12,000 industrial firms in 140 categories, and to hundreds of gas, electricity and coking plants and a number of other consumers. The allocations had to be formally notified to the firms on behalf of the Government. Divisional Coal Supplies Officers were told how much to supply to each consumer. They then arranged for the coal to be supplied from particular Areas or pits. Meanwhile the coal had to be offered for sale to consumers and accepted by them, in most cases through distributors. The winter allocations were in fact introduced as planned on 3rd November.

Winter Transport Plans

481. The success of the winter scheme depended above all on the capacity of the country's strained transport system to move the Board's output. When the plans for the disposal of coal during the winter were being made, output was increasing, and it was expected to increase further if the miners agreed to work longer hours. The transport situation showed few signs of improvement, and it would have been tragic if the industry's extra efforts had been frustrated by lack of transport. The Government therefore decided to give the movement of coal priority over all other railway traffic during the winter. They also ruled that the railways should be relieved by using other methods of transport as much as possible. Towards the end of the summer, therefore, the Board made plans with the Ministry of Transport to divert as much coal as possible from the railways to other means of transport. A survey of the country's canals—which carry only about 2 per cent. of the total coal traffic—showed that little coal could be diverted from rail to canal. There remained diversions from rail to coastwise shipping and road.

482. Coastwise shipping already carried nearly a fifth of the total coal traffic. Further expansion would depend on port capacity and shipping, and it would also depend on expense. Before the war it was cheaper to send coal by sea than to send it by rail. Since then, however, the situation has been reversed. A survey was made with the main distributors of coal during the autumn with the object of diverting coal from rail to sea—to be shipped from the Tyne and Humber ports to the south and south-west. From November onwards, with the co-operation of distributors it was found possible to keep off rail between

20,000 and 30,000 tons a week which was shipped coastwise from the Tyne, Bristol Channel and the Mersey. The effect of these diversions was to increase the total coastwise movement of coal to nearly 600,000 tons per week, the biggest quantity on record.

483. The diversion of coal traffic from rail to road meant that allocations had to be "switched" from some collieries to others. It was decided that the maximum distance that coal should be carried by road should be 40 miles for deep-mined coal, and 70 miles for opencast. As most consumers want not merely coal, but coal of a certain sort, this re-allocation of consumers to collieries was complicated. Some pits had to despatch more coal by road, others had to do it for the first time and had to improvise loading into road vehicles. Roadways were laid to give lorries access to rail-served screens, whilst many adaptations were made at "landsale depots" to increase the rate of lorry loading. Mechanical loading was introduced to keep lorries waiting as little as possible.

484. Geographically, the different Divisions were not equally fitted to increase their road movement, and from the outset it was clear that the greatest extra road movement would be possible in the East Midlands Division. In this Division a committee was accordingly established under the Regional Traffic Commissioner, including representatives of the Divisional Board, the Road Haulage Association and the railway companies. This Committee established an executive body through which the supply of additional road vehicles was arranged. Much of the work was undertaken by the local officers of the Road Haulage Association. It was planned to increase road movement gradually in the Division from 27,000 tons a week to 77,000 tons a week. In fact, by mid-December road movement reached 89,000 tons per week.

485. In the country as a whole, the road movement of deep-mined coal during the summer had been about 290,000 tons per week, and in September an increase of 125,000 tons per week was planned. During the week ended 20th December road movement totalled 445,000 tons per week, an increase of 155,000 tons over the summer figure.

486. Where the abnormal road movement led to increased delivered prices the Ministry of Fuel and Power bore the extra cost on coal going to domestic consumers, and on other coal the extra cost over the first 2s. 6d. per ton.

487. The National Coal Board were represented on the Winter Transport Executive Committee, which, under the chairmanship of the Parliamentary Secretary to the Ministry of Transport, was set up with the object of "reviewing freight transport problems and ensuring that available transport was put to the best use in the national interest". The Committee also included representatives of Government Departments, the Transport Commission, the Trades Union Congress, and industry generally.

488. In brief, the effect of the measures described was to maintain the coal traffic on the railways at its previous level, and to divert the whole of the increased production of deep-mined and opencast coal to sea and road transport. Meanwhile, at the turn of the year the railways were showing signs of recovery. There were more wagons and locomotives in running condition. The main reason for this recovery was the mild weather in November and December, though the first improvement came with the response of the trading public to the Government's appeal for the quicker release of loaded wagons. Apart from their direct share in the drive to repair more wagons, the Board's action (as the railways' biggest customer) in regulating the flow of coal traffic and in withholding the burden of a large additional tonnage undoubtedly gave the

railways a breathing space. This is illustrated by the statistics of coal output lost during the last three months of the year through rail transport difficulties, compared with the corresponding figures for 1946.—

TONNAGE LOST THROUGH TRANSPORT DIFFICULTIES

Week Ended	1947	1946
	Thousand Tons	
4th October .. .	—	5 5
11th „ . . .	0 5	8·9
18th „ . . .	0 6	—
25th „ . . .	—	1·3
1st November . .	0 5	5·3
8th „ . . .	—	16 8
15th „ . . .	1·1	15·1
22nd „ . . .	1·4	5 9
29th „ . . .	0·7	7 9
6th December . .	—	20·5
13th „ . . .	—	103 4
20th „ . . .	—	128 9
27th „ . . .	—	29 8
Total . . .	4 8	349 3

The Resumption of Exports

489 The winter transport plans for coal would have been far less successful, however, had it not been for the resumption of exports. Given that coal output was going to increase, there was a good case for exporting coal in order to reduce the strain on the internal transport system. If railway wagons were scarce they could be employed more economically in the short hauls from pit to port than in long hauls to inland consumers.

490 The output of deep-mined coal continued to increase during the autumn and early winter—particularly after the agreement for longer hours of work. Output per man shift (all workers) increased from little more than one ton in the summer to 1·13 tons in the weeks before Christmas, compared with 1·06–1·07 tons at the same time in the previous year. At the face it increased from 2·7–2·8 tons in the summer to 2·96 tons just before Christmas (compared with 2·82–2·83 tons in the same weeks of 1946). Absenteeism fell from nearly 12 per cent in the late summer to just below 10 per cent. (12–14 per cent. in December, 1946). The improvement was most marked among face workers where absenteeism fell to 10–13 per cent, compared with 14–17 per cent in December, 1946. At the same time the mild weather was particularly favourable for opencast mines, the output of which usually falls off during the winter. In fact these mines almost maintained their summer high rate of output until the end of the year. The result was that the country's total coal output increased to more than 4½ million tons a week, and in the “bull” week before Christmas (when miners are keen to earn all they can for the holiday) output of deep-mined and opencast coal reached 4,395,100 tons. This compared with 4,026,300 tons in the corresponding week of the previous year. With this better output and with consumption unexpectedly low because of the mild weather, the small deficit of coal which had persisted throughout the summer disappeared, and a substantial surplus of between 100,000 and 200,000 tons a week took its place.

491. It was difficult to dispose of this surplus coal fairly among the inland consumers. For one thing, output fluctuated from week to week in different parts of the country where the pits worked on alternate Saturdays, which made it hard for the Board to take on new regular commitments. The surplus was unevenly spread among the different grades of coal, and the biggest surplus quantities naturally consisted of types of coal in least demand. Stocks held by consumers continued to increase until near the end of the year, and many consumers had then as much in stock as they could hold or afford, and would not accept additional deliveries. Most important of all, despite the general measures taken to relieve the railways by diverting coal to road and coastwise shipping, it became impossible to move all the surplus coal from the pits which produced it to the consumers who wanted it. In particular the improvement in output in the Northern and South-Western Divisions—from which coal must in any case be moved mainly by sea—meant that some collieries had either to ship coal overseas, or close down through lack of inland transport. Faced with this situation in November the Board asked the Minister of Fuel and Power to remove the restrictions on bunkering at British ports, to end the practice of “double-bunkering” abroad, and to permit the Board to ship coal to overseas bunker depots. These relaxations—the first steps in the resumption of exports—were granted, and absorbed some 30,000 tons a week of the surplus. As output continued to increase during December the Minister also gave the Board permission to load occasional cargoes to countries which had taken part in the Conference of European Economic Co-operation (the “Marshall” countries). Meanwhile, a number of amendments were made in the winter budget; in particular, supplies to house coal depots and coke ovens were increased.

492. Not only were stocks at the beginning of the winter a million tons greater than the budget estimate, but they continued to increase until the end of November, when they totalled 16,822,000 tons compared with only 10,264,000 tons at the same date in 1946. By the end of the year only 38,000 tons net had been withdrawn from stock since the beginning of the winter, compared with 2,150,000 tons by the end of 1946. Though the coldest weather was yet to come, the situation was clearly safe. The following table, which compares stocks held by consumers at the end of 1947 with stocks held at the end of 1946, illustrates the improvement in the coal supplies situation during the year.—

COMPARISON OF STOCKS AT END OF 1947 AND 1946

	End of 1947		End of 1946	
	Thousand Tons	Weeks' Supply	Thousand Tons	Weeks' Supply
Gasworks ..	2,588 0	4 7	1,428 6	2 7
Power Stations	3,728 6	5·5	1,610 4	2·6
Railways . . .	828 5	2 8	380 0	1 3
Coke Ovens	795 6	1 9	466 9	1 2
Iron and Steel	944·0	4 4	332·6	1·7
Engineering . . .	746 3	7 7	253 3	2 2
Other large Industrial consumers	3,988 5	5·8	1,562·0	2·2
House Coal	1,982 6	3·1	1,656 7	2·7
Miscellaneous	547 1	—	775 7	—
Total .. .	16,149 2		8,466 2	

With increased output, restrained home consumption and a safe stock position, the Government could confidently announce on 17th December that as from 1st January, 1948, regular exports would be resumed to foreign countries, and

that the winter budget would be amended accordingly. Though coal exports had been resumed because there was a danger of some pits having to close down, the Government now decided that the coal industry should begin to play a deliberate part in the country's export drive in order to earn foreign exchange and save dollars. At first, shipments were to be made at the rate of 200,000 tons a week or 10 million tons a year—about half as bunkers at British ports and half as cargoes for export (including cargoes for bunker depots abroad). Under the "Marshall Plan" Britain is expected to ship 13 million tons in 1948. Of this, seven million tons is to be for ships' bunkers and bunker depots, and six million tons for export to the countries participating in the Plan. The Minister of Fuel and Power made it clear on 17th December that some coal should be sent to other countries as well, so that the target for exports and bunkers in 1948 should be some 15 to 16 million tons, which would mean that the weekly rate of shipment would have to be stepped up well beyond 300,000 tons a week before the end of the year. Under the Marshall Plan, Britain was not expected to begin regular exports of coal before April, 1948. The shipments begun at the end of 1947 were therefore several months ahead of schedule.

Change in the Organisation of the Areas

493. In the late autumn, the Board reviewed the Area organisation on which the day-to-day management and the sound development of the industry depended. The Board had appointed as Area General Managers highly qualified mining engineers. They did this because of the importance of increasing coal production at once and of planning the technical reconstruction of the collieries. But though the Area General Manager was expected to give most of his time and energies to his purely technical functions, he had been cast in a double role: he was also responsible for the efficiency of general management in his area and for co-ordinating the activities of his expert colleagues looking after marketing, finance, labour, science and administration. He was Chairman of the Area Management Committee. For production matters he was responsible to the Divisional Production Director, and on other matters to the Chairman of the Divisional Board.

494. The Board did not regard this arrangement as ideal, but when they made it in 1946 they felt that there was no alternative. They decided at the outset that it was to be an experimental arrangement. Area General Managers were liable to be over-burdened by the addition of administrative duties to purely technical functions. On the other hand, they might find it difficult to discharge their general responsibility for the business efficiency of the Area, when their main efforts were concentrated on mining engineering. These disadvantages were theoretical. Everything depended on the personal qualities of the Area General Manager and the other members of the Area Committee. In practice, there were few difficulties, but some did come to light in some Areas.

495. By the end of 1947 the National Coal Board, after conferring with Divisional Boards, decided to introduce a change. The change was to be introduced gradually and was to be timed by the Divisional Boards to fit in with local needs and conditions. The new post of Area General Manager was to carry full responsibility for Area management in all its aspects, and consequently the Area General Manager would now answer to the Divisional Board as a whole. The production activities of the Area would be in charge of a newly appointed Production Manager—on the Area General Manager's staff. All Directors on Divisional Boards would have direct access to the Area General Manager, and he

to them. The normal day-to-day contact between the expert officials on the Area General Manager's staff and the corresponding Directors on the Divisional Board would continue.

496 The new posts of Area General Manager which were thus created involved duties and responsibilities of a kind which few of the industry's administrators have been called upon to perform in the past. The Board will fill these posts in the future from among mining engineers and others who have shown exceptional qualities as industrial administrators. The men who had filled the posts of Area General Manager before had, however, all acquired some degree of experience of administering a large organisation. In general, these were the only men who had sufficient experience and had in the past accepted anything like comparable responsibilities. Most of the new posts were accordingly filled by appointing those who had previously been styled Area General Manager

CHAPTER X

LOOKING TO THE FUTURE

497 During 1947 the Board took over the industry and did what they could to increase output immediately. They also had to concern themselves at once with the long-term programme for the re-organisation and reconstruction of the industry. The first steps in long-term planning have been described in Chapter IV. As the year progressed much preliminary work and investigation was carried out in preparation for a co-ordinated national plan for the industry. Work on planning for the future falls naturally into several main subjects—reconstructing old pits and sinking new ones, forecasting the demand for coal and settling a long-term policy for prices and wages

Reconstruction Schemes and New Collieries

498 The planning staffs at Areas and Divisions began the big task of working out schemes for the reconstruction of old collieries and the sinking of new ones. These schemes may cost up to £3,000,000 each and may take up to ten years to complete. When the production possibilities of each coalfield have been fully surveyed, the Board's planning staff at Headquarters will examine projected schemes in the light of the probable future demand for coal, the cost of production in the different coalfields, the availability of labour, and many other factors. The re-shaping of the industry according to a national long-term plan will be an immense task involving heavy capital commitments. Nothing comparable to it in size and complexity has ever been attempted in the coal industry before. The Nationalisation Act requires the Board to obtain the approval of the Minister of Fuel and Power for the lines of their programmes for re-organisation and development of the coalfields and this they will do when their plans are further advanced. Meanwhile they have kept the Minister in touch with interim arrangements.

499 During 1947 much work was done in planning and carrying out reconstruction schemes which will be required whatever future decisions are taken on production policy. Altogether 52 major capital schemes (each costing more than £100,000) to a total value of £22,691,000 had been approved by the end of 1947. This total represented old schemes begun by the colliery companies before the vesting date, and also new schemes approved during the year. During 1947 a total of £2,898,300 was spent against these authorisations. A

summary of the schemes authorised is given at Appendix VIII. The schemes taken over from the former owners had to be reconsidered in detail—and in many cases amended—in the changed circumstances brought about by nationalisation. For example, some schemes of reconstruction prepared by colliery companies were limited to the area of the coal in lease to the company. Now that the ownership of all the unworked coal and all the adjacent collieries had vested in the Board, it was for the Board to decide whether the original scheme would be required at all or whether it should become part of a wider scheme for concentrating the output of a number of collieries into one production unit of the most efficient size.

500. The following are typical examples of schemes being projected or carried out in the different Divisions. The local projects may not all be put into effect. Decisions on some will depend on the "national" plan.

SCOTTISH DIVISION

501. Most of the main developments in Scotland are likely to take place in the Lothians and in Fife. Altogether, 32 schemes involving major reconstruction of existing collieries, are being carried out over a period of two years. In addition nine new collieries are projected—several bigger than any of the existing collieries in the Division. The first of these is already being sunk at Rothies in East Fife. When completed this mine should have an annual output of about $1\frac{1}{2}$ million tons, with an estimated output per man-shift (overall) of 47 cwts. It has been designed on the horizon mining system and will employ large mine-cars carrying 3 tons of coal and drawn by high-powered locomotives. The coal will be raised by Koepe winders from an ultimate depth of over 1,000 yards. As in all new collieries, there will be a canteen and medical and first-aid services. The mine should be producing 2,000 tons a day by 1956, and should reach full production two years later. Work is also to start soon on another big colliery in Fife at Dysart, which will be planned to raise more than 2,000,000 tons a year from under the Firth of Forth. Other big mines are contemplated at Westfield, Fife, Killoch, Ayrshire; and Kinneil, West Lothian.

NORTHERN DIVISION

502. Reconstruction work is in progress at 19 collieries, and plans are being prepared for the reconstruction of 15 more. An example of work in progress is the reconstruction of St. Helens (Cumberland). This involves the relining of both shafts, the installation of skip winding, with electric winders, and a new ventilating fan. Mining is to be on the horizon system, with mine-cars and locomotive haulage. The mine will produce about 275,000 tons a year. Work should begin during 1948 on three other long-term schemes. At Boldon colliery (Durham) both shafts are to be deepened. A new pit bottom is to be constructed, and skip winding, locomotive haulage, mine-cars and gateway conveyors are to be introduced. The pit will have an output of about 725,000 tons a year. A new composite colliery with an annual output of about 2,750,000 tons is being considered to replace Murton, South Hetton, Hetton, Elemore and Eppleton collieries (Durham). This involves sinking a new shaft with a diameter of 26 feet, to a depth of 1,860 feet, the introduction of four-cage winding, locomotive haulage on four horizons, $4\frac{1}{2}$ -ton mine-cars and central workshops on the surface. Reconstruction of Ashington (Northumberland) is also planned, involving the sinking of two new shafts 18 feet in diameter, to a depth of 1,150 feet, with cage winding, electric winders, locomotive haulage and 3-ton mine-cars. The eventual output of this colliery should be about $1\frac{1}{2}$ million tons a year.

NORTH EASTERN DIVISION

503. Provisional plans have been made for the development of the Yorkshire coalfields over the next 10 years. Many pits would be concentrated into bigger units, which would mean closing down more than 20 of the existing pits. No new pits are to be sunk in areas at present unworked, though a number of existing pits will need deepening, and some new shafts will be sunk at existing collieries (one is being sunk at Manton at present). Large-scale reconstruction work was carried on during 1947 at some half dozen collieries in the Division. At Yorkshire Main colliery, for example, level roads are being driven underground for locomotive haulage, and a new pit bottom is being constructed. The scheme should be completed towards the end of 1948, when output should reach a rate of about 1,000,000 tons a year. A similar scheme is in hand at Hatfield which should also be finished in 1948. Reconstruction work on a large scale is in hand at Bentley, Aldwarke, Elsecar, Woolley, Darton and North Gawber, Bullcliffe Wood, Primrose Hill and Lofthouse collieries. Another important project is the development of Maltby colliery at a cost of about £1,000,000. Both existing shafts are to be deepened, a new pit bottom is to be built, and level roads driven for locomotive haulage. New winding gear is to be installed, and a new preparation plant. This work should be finished by 1951, and should increase the colliery's output by about 400,000 tons a year.

NORTH WESTERN DIVISION

504. A number of collieries have already been selected for reconstruction. The Bradford colliery in the Manchester Area is to be reconstructed on modern lines, and when the work is completed will produce about 1,000,000 tons a year. By the end of 1947, shaft sinking, entrance to the skip pocket and driving of horizontal roads had begun. On the surface a brickworks and chimney have been demolished and work has begun on the installation of a new fan. At Mosley Common (Manchester Area) a combined mine has been planned with an eventual output of about 2,000,000 tons a year. Coal from several mines—Mosley Common, Sandhole and Newtown collieries—is eventually to be brought up one winding shaft and handled by one surface plant. This scheme was already begun before nationalisation, and work continued throughout the year. Good progress has been made with the construction of towers to carry the conveyors, and work has been done on the construction of a loading point for railway wagons, on widening the shaft and on underground work for a new pit bottom. Another scheme is in hand in the Manchester Area at Astley Green. This involves horizon mining of the deeper and main seams, combined with the working of an upper seam by traditional methods. Development of the upper seam is nearly complete and production began in 1948. Tunnelling for the horizon mining has been going on for some time. A scheme has also been drawn up for Bold colliery (St. Helens Area) with an eventual output of 1,500,000 tons a year (negotiations were carried on with the Central Electricity Board for the siting of a new power station nearby) and preliminary plans have been made for the reconstruction of Sutton Manor and Cronton in the same area, both with an eventual output of 1,000,000 tons a year. Much work has also been done on the reconstruction of Llay Man colliery in North Wales. The development of this coalfield must depend to a large extent on the result of boring now being carried out.

EAST MIDLANDS DIVISION

505. In this Division there is no need for new pits to be sunk for at least five years, except at Calverton where work was begun before the war. The Divisional Board's plans, however, envisage reconstruction and modernisation of existing pits on a large scale. A typical example of reconstruction and

concentration is the Williamthorpe scheme; the output from four collieries—Williamthorpe, Holmewood, Grassmoor and Bonds Main—is being concentrated at Williamthorpe and electric winders and a new simultaneous decking plant are being installed. New roadways are being driven and the capacity of the new coal preparation plant is being increased. The scheme is likely to cost nearly £500,000, and should be completed by 1953. The eventual output will be about 1,350,000 tons a year, and costs should be reduced considerably. Work was continued during 1947 at about a dozen collieries on major reconstruction schemes, started by the colliery companies and carried on by the Divisional Board. At Clipstone, for example, the shaft is being deepened to reach lower coal measures, and two new pit bottoms are to be constructed, level roads are to be driven, and skip winding is to be introduced. As a result, output should be doubled by 1958, and an output per man-shift of 3 tons or more should be achieved. The shaft is also being deepened at Thoresby colliery, and skip winding and locomotive haulage are to be introduced. Output should be about 1,250,000 tons a year by 1952. A reconstruction scheme is also to be carried out at Rufford colliery, where locomotive haulage is to be put in. Work continued during 1947 on the only new pit in the Division at Calverton, near Nottingham. The shaft is being sunk by the “freezing” process. By 1957 this colliery should be producing 780,000 tons a year.

WEST MIDLANDS DIVISION

506 Much reorganisation and reconstruction are needed in the Cannock Chase Area. At present, coal is wound at 33 shafts and one drift. Plans are being made to concentrate output through seven deep mine units and four drifts by 1958. Of particular interest are the schemes for Littleton, Wimblebury, Hilton Main and Wyrley No 3. At Littleton colliery it is planned that one shaft shall be deepened or a new shaft sunk, and that the mine shall be completely reconstructed on the surface and underground—in particular to permit horizon mining. This scheme should be finished by 1954, and potential output is about 1,250,000 tons a year. The scheme for Wimblebury involves a new 24 feet diameter shaft and the construction of an entirely new colliery 500 yards away from an existing shaft. This will gradually take over the workings of a number of other collieries, and an annual output of 2,500,000 tons should be reached by 1958. Major reconstruction is visualised for Hilton Main, but two years' development work will be needed because of faults. Eventually this colliery is expected to need a new 24 feet diameter shaft to a depth of 800 yards, yielding an output of 1,250,000 tons a year by 1958. At Wyrley No 3 concentration of the workings is planned which would throw six shafts out of use, the eventual output would be about 750,000 tons a year. In the North Staffordshire Area an important reconstruction is being considered for Hem Heath colliery, involving a new 24 feet diameter shaft to a depth of 1,200 yards. The mine is to be laid out on the horizon system and should last for about 150 years. At the Stafford Unit No 2 plans are being prepared for another unit to produce 1,500,000 tons a year. At the Whitfield Unit—also in the North Staffordshire Area—work has continued during the year on a horizon mining project started 2½ years before nationalisation. The main tunnel—now two miles long—is being prepared for locomotive haulage and will be ready by September, 1948. Output should eventually reach 1,500,000 tons a year, with an output per man-shift of 2½ tons. In the Warwickshire Area there is to be widespread reorganisation of underground transport and complete electrification of many mines. Two mines are to be completely reconstructed, and a number of new shafts will probably be needed.

SOUTH WESTERN DIVISION

507. A detailed study of the anthracite coalfield was carried out to see how the output of the existing mines could be increased and their efficiency improved. Plans were considered to reorganise these mines. Two were shortly to be closed, and closure of nine others was considered. In the rest of the Division six major reorganisation and concentration schemes are being considered. Work has continued on a horizon mining scheme at Llanharan colliery begun before nationalisation, and production should begin soon. This will be the first horizon mining project with underground locomotive haulage to come into operation in South Wales. Work was also continued on the reorganisation of Ffaldau colliery which had been closed before the vesting date. This work should be completed in 1948. A major reconstruction is planned at Nantgarw involving the reorganisation of the existing colliery on modern continental lines, to produce an annual output of 750,000 tons, with coke ovens and by-product plant. This scheme should be completed by 1957. In addition to the reconstruction of existing mines, some large new mines will probably be required in this Division during the next 10 years.

SOUTH EASTERN DIVISION

508. Plans are being prepared for horizon mining at Chislet and Betteshanger collieries on a five-year programme. It is also planned to concentrate output at Tilmanstone colliery on one loading point over the next two years, and a scheme has been prepared to develop Snowdown colliery to produce an eventual output of about 1,500,000 tons a year.

Forecasting the Demand for Coal

509. Before a long-term production plan for the industry can be worked out, the Board will have to study the probable future demand for coal from their customers at home and abroad. At home, during the last decade, there has been a great increase in the proportion of the country's coal output consumed by the public utility services—mainly by power stations and gas works—and this trend is likely to continue. More and more people are likely to use smokeless fuels—anthracite, coke and patent fuels—as advocated in the Domestic Fuel Policy Report Cmd 6762 (the Simon Report). The country's expanded iron and steel and engineering industries are creating a heavy demand for coking coals, which may last for some time to come. More of the country's population and industry—and hence of the consumers of coal—are situated in the south of the country than were there some decades ago. The by-products of carbonisation are in increasing demand as new "synthetics" industries grow up. To many consumers the chemical composition of coal is becoming more important and the heat-content less so. So much can be seen at a glance, and further study will suggest which types of coal are likely to be wanted in the future, and where. Much help in working out the long-term trend of the demand for coal may be expected to come from organised bodies of consumers with whom the Board have already established cordial relations.

510. The total home demand for coal, however, is relatively stable. It is in the export markets that it will be most difficult to forecast future demand. The Board took over the industry at a time when Europe was emerging from the coal famine created by the war. By the end of 1947 the worst of this famine was over. All the coal-producing countries of Europe had been straining to increase their output for nearly three years. In Poland, Czechoslovakia and France, coal production had already surpassed, and in the Saar had reached, the pre-war output. In Belgium and the Netherlands it was between 80 per cent. and 90 per cent., and in Western Germany some 65 per cent. of pre-war. Altogether, there were more miners at work in Europe at the end of 1947 than

before the war, and though each miner was producing less than he produced pre-war, their combined output was not far from the pre-war level. In addition to this output of hard coal, much lignite was being produced, particularly in Germany and Czechoslovakia. The international trade in coal, though naturally slower to recover than output, improved considerably during 1947, and bid fair to improve further in 1948. The Allied Authorities in Germany had agreed on a sliding scale by which the proportion of coal exported increases with output. Poland was already exporting coal on a large scale, and as coal output in Russia had increased, less Polish coal was being sent there and more was being sent to Western Europe. Some 3 million tons of American coal was still being shipped across the Atlantic each month. Finally, Britain resumed regular exports at the end of the year.

511. The emphasis has now shifted—it is no longer “coal” that is short, but certain sorts of coal. As the shortage eases, the importing countries in Europe and elsewhere become more particular about the sort of coal they wish to buy. In particular, coking coals are still scarce. The vast amount of reconstruction and repair work which has to be done in Europe has created a great demand for steel and therefore for coking coals. There is still a shortage of good quality coals of most sorts. With the increased outputs and imports of Western Europe, and the warm summer and mild winter of 1947, stocks in Europe of “general purpose” coals at the end of the year were good, but most countries were short of anthracite, low volatile steam coals and good quality locomotive coal. And though the countries of Europe had as much of some kinds of coal as they needed, many of them were still dependent to a large extent on American coal. This continued movement of coal across the Atlantic is wasteful and expensive, and it is to the advantage of every importing country in Europe to take its coal from sources nearer home as soon as possible. The movement of American coal means that some 400 ships, each carrying 8,000 tons, must make the journey to Europe every month—and most of them must sail back empty. Another disadvantage is that these large ocean-going ships cannot be discharged at many of the European ports where coal is wanted, which can only take smaller ships. Not only is the cost of transporting the American coal 3,000 miles (and more) heavy, but countries must also pay in scarce dollars or receive less of their “relief” shipments than they would otherwise have received. The preliminary report of the European delegates under the Marshall Plan envisaged the gradual reduction of American coal shipments to Europe over the next few years, finally ceasing in 1951. If the recent rate of progress is continued, American exports may well cease before this.

512. The British coal industry must clearly play a big part in reducing the need for American coal in Europe. The industry is already committed under the Marshall Plan to a considerable increase in both the output and export of coal over the next four years. The following table summarises Britain's production and export programme under the Marshall Plan.

MARSHALL PLAN : BRITISH COAL PROGRAMME
(MILLION LONG TONS)

Year	Production			Inland Con- sumption	Exports and Bunkers			
	Deep- mined	Open- cast	Total		Foreign Bunkers and Overseas Bunker Depots	Partici- pating Countries	Other Countries	Total Exports and Bunkers
1948	200	11	211	198	7	6	—	13*
1949	210	13	223	200	7 5	14	1·5	23
1950	220	15	235	202	8	22	3	33
1951	230	15	245	204	8	28 5	4 5	41

These targets will be hard to achieve. Apart from the physical problems of increasing output, there will remain the commercial task of selling each year more British coal to countries which have had to do without it for many years and are being offered coal in increasing quantities from Germany and Poland. The Board are fully aware that the real testing time has yet to come. They have not only to produce enough coal for export, but to produce good coal of the kinds that the importing countries want. For the next few years the way is fairly clear, but as time goes on the demand for British coal will depend more and more on the cost at which it can be mined and the prices at which it is sold.

A New Price Structure for the Industry

513. During the war the prices of coal were controlled by the statutory Selling Schemes on behalf of the Government. When they had to be increased this was done—for administrative convenience—by imposing a flat-rate increase. Cumulatively, these increases amounted to more than £1 a ton added to a pre-war average pithead price of 17s. to 18s. a ton. The effect has been that whereas the prices of expensive coals may now be not more than double their pre-war prices, the prices of cheap coals have been trebled or even quadrupled.

514. The present price-structure of coal is therefore unrealistic, and the Board intend to bring in a new and rational price structure as soon as possible. They realised, however, that it was impossible to do this without first of all achieving a standard classification of coal by size and quality, to which the new prices could be related. The task of classifying British coals is formidable. The practice before nationalisation was mainly based on local traditions and therefore presented a varied and confusing picture. Different names were applied to the same coals, and different coals had the same name. Work on classification has been greatly helped by the report of the British Colliery Owners Research Association on the "Size Grading of British Coals", which was drawn up in 1946. After consultation with the Domestic and Industrial Consumers' Councils, the Board have adopted the British Colliery Owners Research Association's recommendations. The main descriptions and classifications adopted are as follows:—

Large Coals

Large coals (having no upper size limit) are to be described in terms of the size and shape of the aperture of the screen over which they are made.

Graded Coals

Graded coals (made between two screens) are to be classified in seven standard size groups, shown in the table below:—

STANDARD SIZE GROUPS FOR GRADED COALS
(IN INCHES)

Name of Group	Typical Screen Size (in round hole)	Permitted Range of Screen Apertures (in round hole)	
		Upper Limit	Lower Limit
Large Cobbles	6 × 3	6 to 8	3 to 5
Cobbles	4 × 2	4 to 5	2 to 3
Trebles	3 × 2	2½ to 3½	1½ to 2
Doubles	2 × 1	1½ to 2½	1 to 1½
Singles	1 × ½	1 to 1½	½ to 1
Peas	½ × ¼	½ to ¾	¼ to ½
Grains	¼ × ⅛	¼ to ⅜	⅛ to ¼

Smalls

Smalls (having no lower size limit) are to be described in terms of their treatment and the size and shape of the aperture of the screen through which they are made. In addition, smalls are to be divided into classes according to their fines content

515 For practical reasons these classifications cannot be brought into full use immediately. While in some cases they mean only a change of name, in others they mean new screens and other changes in coal preparation plants. Meanwhile, work on the classification of coals according to their coking qualities and the proportion of volatile matter, sulphur, ash, etc., is continuing. In this work the Board have been much helped by "Survey Paper No 58" of the Department of Scientific and Industrial Research, in which coals are classified or "ranked" in accordance with their coking property and volatile content.

516 The study of the principles on which price policy should be based was also begun during 1947. Coal is not only produced in different sizes and qualities, but also at different costs of production and in different parts of the country—some near and some far from the main areas where it is consumed. It is sold to many types of consumer each with special needs and preferences, carried by different methods of transport, and sold in quantities varying from a few hundredweights to many thousands of tons. The ultimate price paid by the consumer of coal must take account of all these—and many other—factors. Much work has to be done before a final policy can be worked out. To help them in this work the Board intend as soon as possible to consult organised bodies of distributors and consumers in order to benefit from their knowledge and experience.

The Wages Structure

517. The basis on which wages were calculated before nationalisation varied from coalfield to coalfield and often from pit to pit. Earnings did not depend merely upon the type of work performed or upon the physical efforts of the men, although both were important factors. They also depended on geological conditions, on the efficiency with which coal was got from the face, transported to the pit bottom and wound to the surface, and on many local and traditional practices.

518 An overhaul of the wages structure was included in the programme of discussions agreed between the Board and the National Union of Mineworkers before the Vesting Date, and would have followed discussion of the three most urgent questions—maintenance of the guaranteed weekly wage, payment for statutory holidays, and the five-day-week. But on closer examination, the task was found to be even more difficult and complicated than had originally appeared. The Board and the Union agreed that for the time being they should not try to deal with the problem in all its aspects. Nevertheless, the wages structure underwent important changes during the year. Some of the adjustments of wages which were made in 1947—in particular the increases in minimum wages and in the rates of pay for the lower paid workers—reduced inequalities between districts.

519 Further revision of the wages structure will probably have to be a gradual process, linked with the technical improvement of the industry.

Planning for the Future

520 The long-term planning of output, coalfield by coalfield, and the development of the Board's price and wages structures are closely related. It is not enough to produce more coal. It must be coal of the sort that consumers

want at prices they are prepared to pay. In the words of the Nationalisation Act, the Board must make "supplies of coal available, of such qualities and sizes, of such quantities and at such prices as may seem to them best calculated to further the public interest in all respects."

521. In making their plan for the reconstruction of old pits and the sinking of new ones the Board have a great responsibility. They are entrusted with the expenditure of a large sum of capital at a time when the country can ill afford it. This capital must therefore be used as economically as possible. It must be spent in such a way that the country gets the greatest possible benefit. The plan must ensure that the output of the right kinds of coal is expanded in the right places and by the right amounts.

522. A forecast of the demand for coal at home and abroad will give an idea of how much coal of different sorts is likely to be wanted in the future. An examination of the reconstruction schemes which could be carried out will show where the long-term output of different sorts of coal can be increased, and at what cost. This information will indicate the possibilities before the Board. But by itself it will not tell the Board which of many possible lines of action to take.

523. Both in running the industry from day to day and in making their plans for the future, the Board have to decide where to expand output and where to contract it, what sorts of coal to produce, and what prices to charge. The industry must, by virtue of the Nationalisation Act, cover its costs taking good years with bad. But if over a period of years the industry as a whole is neither to incur a loss nor make large profits, individual pits, Areas or coalfields may do so. If a pit or a district is running at a loss, despite every effort to make it pay its way, then there is a case for altering the level of output or the price at which the coal is sold. Profits made by individual pits or districts will also suggest a need for changes. Both losses and profits will suggest that the nation's resources are not being used to the best advantage. This is the principle which will guide the Board in their day-to-day decisions and in incurring capital expenditure for the future. So far as possible, it means the avoidance of waste.

524. In practice, however, the Board will often have to recoup themselves out of profits made by some pits or coalfields to cover losses made by others. But they will do so only for good reasons. For example, at the present time the Board could make coal much cheaper by closing down unprofitable pits; they could also get much higher inland prices for several of their coals without selling much less of them. But neither course would be in the national interest. The Board must have regard to "social costs", many of which do not figure in their profit and loss accounts, for example, the effects of unemployment which may be caused by the contraction of output in any coalfield. The Board must ensure that their collieries do not work all the most accessible seams and leave the more difficult seams for the future: they have a responsibility to posterity as well as to the people of to-day.

525. The Board cannot be guided by business considerations alone. They must, however, weigh carefully the strictly economic effects of any action on the industry and on the nation as a whole. The industry must be made as efficient as possible. Thus the national interest to-day demands that there shall be a large and growing surplus of coal for export, but a surplus will be of no avail if it is too costly to sell. To-day and in the future, the national interest will be best served if the industry produces the quantities and kinds of coal that are needed as cheaply as possible—with a fair reward for management and men.

CHAPTER XI

REVIEW OF THE YEAR

526 When the Board took over the industry the labour force had declined to a record low level, many collieries were old and for the most part in need of modernisation. Coal stocks were low. In February there was a fuel crisis. In the middle of the year, the five-day week was introduced. Then came the Grimethorpe strike. In the Autumn the miners volunteered to work extended hours. Meanwhile, the Board took measures to increase output immediately. They introduced technical improvements and took practical steps to enlist the wholehearted co-operation and efforts of the miners and to attract men to the mines. By the end of the year the labour force had increased and so had the productivity of each man. Stocks were built up and exports were resumed. Throughout the year costs increased. The pithead price of coal was raised in August and a further increase was announced, to come into effect in the New Year. The Board incurred a deficit in the first year's operations.

Operational Results

THE CAUSES OF INCREASED OUTPUT

527. In 1947 the British coal mines produced 187,000,000 tons of coal*. This output was 6,000,000 tons more than the mines produced in 1946, an increase of about $3\frac{1}{2}$ per cent. With the 10,000,000 tons produced from the Government's opencast sites it made a total saleable output for the country of 197,000,000 tons, compared with the target of 200,000,000 tons which was set by the Government in February, 1947. Only 5,400,000 tons of this total were exported (including ships' bunkers). Consumers' stocks increased during the year by about 8,000,000 tons.

528. The increase in output had several causes. First, the number of workers in the industry increased by 26,000 during the year (compared with a decrease of 4,000 in 1946). The number of workers at the coal face went up by 11,000. The net increase in the total number of workers was the result of a recruitment of 94,000, offset by a wastage of 68,000, in a year when the raising of the school-leaving age reduced the number of boys who could be recruited. Secondly, attendance improved, absenteeism decreased from nearly 16 per cent. in 1946 to about $12\frac{1}{2}$ per cent. in 1947 for all workers, and from about 19 per cent. to 15 per cent. for face workers. Thirdly, on the average each worker produced more coal each day, output per man-shift (all workers) for the year was 1·07 tons, compared with 1·03 tons in 1946; while output per man-shift at the coal face rose from 2·76 to 2·86 tons.

529. It is possible to estimate roughly how much each of these causes—more men, better attendance, more coal from each man each day—contributed to the increased output and how far they were offset by a reduction in the number

* This is the output in the calendar year 1st January to 31st December, 1947. The output of 186,352,000 tons shown in statistical tables 1 and 2 attached to this report refers to the 52 weeks ended 27th December, 1947. The figure of 184,700,000 tons shown in sheet 1 of Schedule X of the accounts does not include the output of licensed mines.

of working days due to the five-day week. The following calculation has been made in terms of workers at the coal face :—

	Tons
Increase due to increased manpower	— 5,000,000
„ „ „ better attendance	+ 9,500,000
„ „ „ greater output per man-shift	+ 5,500,000
Decrease „ „ reduction in number of working days	— 14,000,000
Net increase	— 6,000,000

The loss of the Saturday shift during five-day week working in the summer was, therefore, almost exactly offset during the year as a whole by better attendance and greater productivity—the latter due partly to greater effort and partly to technical improvements and re-organisation.

530. Further light on productivity is thrown by figures relating to the three main groups of workers in the industry—face workers, other workers underground and surface workers. Output per man-shift of face workers was 3·2 per cent. more than it was in 1946. The corresponding increase for other underground workers (including haulage workers) was 4·7 per cent., and for surface workers it was 6·7 per cent.

THE MINeworkERS' RESPONSE

531. One of the Board's first objectives was to change the spirit of the industry and dispel old bitternesses and old grievances. They had to earn the confidence of the mineworkers and attract men to the industry, and they had to act quickly if the opportunity was not to be lost. At about the time the Board took over the industry they announced that the five-day week would probably be introduced in May. Later they raised the minimum weekly wage and increased the pay of the lower paid workers. They made other concessions to remove pin-pricking grievances. For example, they relieved mineworkers of the need to pay for pithead baths, bringing British practice into line with practice elsewhere. How far these measures, which were desirable in themselves, led to the increase in manpower and production must be a matter of speculation.

532. The prevalence of unofficial strikes in some coalfield districts and the disappointing response to the appeal for extra tasks under the Five-Day Week Agreement must be set on the debit side of the account. Though the output from each man each day at the coalface was nearly back to its pre-war level, and in some parts of the country was consistently above it, much machinery has been introduced at the coal face in the intervening years. After making every allowance for the general effects of the war, the Board hoped for greater improvements in productivity at the coal face than were achieved. The Board also feel that given the co-operation and goodwill of the mineworkers, it should be possible to increase the proportion of face workers to other workers in the industry. During the year the proportion (i.e. of shifts worked at the coal face to shifts worked elsewhere) increased by 1·4 per cent. But there is room for much more progress. For example, haulage operations at loading points are still over-manned in some places. Attendance at the coal face and elsewhere, though improved, is still poor compared with attendance before the war.

533. There is also a credit side to the account. The mineworkers as a whole, by better effort and better attendance, produced more of the coal the country needed. The improved effort in the autumn and winter of 1947 to achieve the "target" of 200,000,000 tons by working longer hours came, for many of the mineworkers, as the climax to a year of sustained effort. The Board have established excellent relations with the National Union of Mineworkers. The Union have never ceased to represent vigorously the claims of their members, but the Board owe much to them for their constant co-operation.

COMPARISON WITH PAST YEARS

534. The following table compares the main results of 1947 with those of previous years.

Year	Saleable Output Deep-mined Coal (Million Tons)	Average Number of Workers (Thousands)	Absenteeism (Per cent)	Output per Man-shift (All Workers) (Tons)
1938	227.0	781.7	6.44	1.14
1939	231.3	766.3	6.94	1.14
1940	224.3	749.2	8.27	1.10
1941	206.3	697.6	9.03	1.07
1942	203.6	709.3	10.39	1.05
1943	194.5	707.8	12.43*	1.03
1944	184.1	710.2	13.62	1.00
1945	174.7	708.9	16.31	1.00
1946	181.2	696.7	15.95*	1.03
1947	187.0	711.4	12.43	1.07

* Owing to changes in the definition of "wage earners" in 1943 and again in 1946, the later figures are not strictly comparable with the earlier. However, the effect of the changes is less than 0.5 per cent.

Financial Results

COLLIERY COSTS

535. In 1947, the average cost of producing a ton of coal was about 4s 3d. more than it was in 1946. Concessions to the workmen designed to promote co-operation and attract recruits were responsible for much of the increase in costs. In a full year they will cost £62,500,000.

536. In 1947 the cost of the five-day week bonus was 3s 0 5d a ton, but after taking credit for the saving resulting from increased productivity, the net cost was 2s 6d a ton from May onwards, which represented 1s 8d a ton for the year. The increase in the minimum wage in November and increases to special categories such as Overmen and Deputies increased costs by 1s. 6 1d a ton, or 4d. a ton for the year 1947. The cost of extended working hours at overtime rates in November and December was 3d a ton, which represented 0 5d. a ton for the year. Other increases in wages costs amounted to 3 6d a ton for the year; these included local wage alterations and the cost of paying more men undergoing training. The increased cost of the agreement to pay for statutory holidays was 1 8d a ton. Allowing free use of pithead baths from 1st April, 1947, cost 0 5d a ton in the year. Altogether these concessions amounted to 2s. 6 4d a ton.

537. The total increase in colliery costs of 4s. 3d. per ton was made up as follows :—

	s.	d.
Increased Wages and other benefits to Workmen .	2	6·4
Increased Cost of Materials, Stores, Repairs and Power	11	·9
Superannuation and other benefits to Officials and Staff	4	·2
National Insurance (Statutory Increase) . . .	1	5
Recruitment, Training, Hostels and Scientific Expenditure	1	5
Net balance of other Increases and Decreases . . .	1	6
	<u>4</u>	<u>3 1</u>

538 The increased cost of materials, stores, repairs and power in 1947 amounted to 11·9d. a ton, an increase of 17·7 per cent. This was mainly due to the general increase in prices in the country; the official Wholesale Price Index of Industrial Materials and Manufactures was 12 per cent. higher in 1947 than it was in 1946. Another factor was the increased proportion of imported timber used, which is more expensive than home-grown timber. Not only were materials and repairs more costly in 1947 than they were in 1946, but more of them were needed because many collieries had big arrears of repair and maintenance work to carry out.

539. The expenditure of 4·2d. a ton on Superannuation and other benefits to officials and staff, consisted of the cost of the superannuation scheme and the agreement on clerical wages and conditions. The increased cost of National Insurance of 1·5d. a ton resulted from the increases in employer's contributions which were effective from 1st October, 1946. The extent to which the Board have developed recruitment, training, hostels and scientific research has already been described. The additional cost in 1947 was 1·5d. a ton.

540 The net balance of increases and decreases in other costs was 1·6d. a ton. The main item of the increases was 1·4d. a ton for salaries, which excludes an increase in salaries of 1d. a ton included above under benefits to officials and staff. The amount of 1·4d. a ton represented the average increase in 1947, compared with 1946, and resulted mainly from the engagement of additional staff for new responsibilities, the replacement of professional advisers by salaried staff, and the payment for overtime working, which has been extensive during the Board's first year. Another increase was in the provision for surface damage (0·2d.). The main reduction was 1·6d. a ton for workmen's compensation.

541 The increase in costs of 4s. 3·1d. a ton represented 12·8 per cent. of the total costs in 1946—no more than the general increase of costs in British industry in 1947, despite the special expenditure which the Board had to incur. Nevertheless, the Board are keenly aware that the industry must be carried on with the least possible demands on the national resources, and that reductions in the cost of production of coal are essential to the country's prosperity. The steps being taken to achieve effective control of costs have already been described. Reconstruction of the mines should, in the long run, reduce costs considerably. Meanwhile, economies depend mainly on greater effort and efficiency on the part of management and men.

COLLIERY LOSSES

542 The duty of the Board under the Nationalisation Act is to cover costs over an average of good years and bad. If the whole rise in costs in 1947 had been recouped during that year by raising the price sufficiently in the closing months of that year, there would probably have been surpluses in later years.

Therefore, in deciding what increases in price the Board should recommend to the Minister, they assumed that the loss should be recovered not in a few months but over a period. In fact, the Minister scaled down the price increases which the Board had recommended, and the increase in price to cover the effects of the Five-Day Week was not introduced as soon as the Board would have liked.

543. The collieries incurred losses mainly in the summer. From January to April, despite the fuel crisis, a profit of £1,500,000 was earned, but between May and August the results were affected by the holidays and by the five-day week, and losses amounted to £9,000,000. The price of coal was increased by 4s. a ton on 1st September, and in September and October a profit of £1,000,000 was made. Then the agreements for an increase in the minimum wage and for the extension of hours at overtime rates came into effect, and in November and December there was a loss of £2,700,000. Accordingly, the price of coal was again increased, this time by 2s. 6d. a ton, with effect from 1st January, 1948. Over the year as a whole the collieries made an operating loss of £9,200,000.

544. Although altogether the collieries made a net loss of £9,200,000, many made big profits. Total colliery profits amounted to £22,000,000 and losses to £31,200,000. If the Board had been free to close unprofitable collieries it would have been easy to improve the financial results, but for several reasons—not least the need to produce as much coal as possible—this could not be done. For some years before nationalisation some collieries made big profits, while others suffered heavy losses—the final results being evened out by the operation of the Coal Charges Account. Through this Account the industry was subsidised by the Exchequer to the extent of £27,500,000 between 1942 and 1946; the deficit arose mainly because of delays in authorising increases in price.

COLLIERY RESULTS FOR 1947 COMPARED WITH 1946

545. The loss of £9,200,000 incurred by the collieries works out at 1s. per ton of coal produced during the year. This loss of 1s. a ton compares with a net profit of 1s. 11 3d. made by the collieries in 1946—a reduction of 2s. 11 3d. a ton. The figure for the 1946 profit is derived from the published “credit balances” (1s 9d. a ton) of the collieries adjusted to allow for the transactions of the Coal Charges Account and the Coal Commission and for certain expenses not included in the published figures. Further adjustments to the 1946 figure have also been made for depreciation. Before nationalisation the only provision for depreciation included in the published figures of the industry was for “wear and tear allowances”. These covered depreciation of plant and machinery only, though colliery companies provided for other depreciation in their accounts. The Board have also to allow more for depreciation than the companies provided. While the depreciation provisions before nationalisation were based on the cost of the assets when purchased (often many years before) the Board have acquired the assets at the much higher values prevailing in 1946. The difference of 2s. 11 3d. per ton between the 1946 profit and the 1947 loss was made up as follows —

	s.	d.
Increase in Costs (<i>see</i> para. 537)	4	3·1
Increase in Proceeds (from the increase in selling price of 4s. a ton on 1st September, 1947)	1	3 8
Reduction in Profits	2	11·3

ANCILLARY UNDERTAKINGS

546. The Board made a profit of £3,016,605 on coke-ovens and other ancillary undertakings. It is not possible to compare these profits with those made by the former owners as particulars of their ancillary profits are not available.

to the Board. There is no reason to suppose that the undertakings are less profitable now than before nationalisation. In some parts of the country losses were incurred on particular activities such as housing and farming. These activities were probably unprofitable before nationalisation.

THE DEFICIT FOR THE YEAR

547. The colliery results are shown below, together with the results of other activities :

<i>Operations</i>					
(Collieries and ancillary undertakings)					
				£	£
Colliery Losses ..	.	..	.	—9,203,905	
Ancillary Profits ..	.	..	.	+3,016,605	
Operating Loss	.	..	.		— 6,187,300
<i>Other Transactions</i>					
Loss on Imported Coal ..	..	..	..	..	— 1,697,992
Provision for compensation for loss of office ..	..	..	.	—	406,192
Other Income ..	..	..	..	..	+ 156,177
Interest and Interim Income payable .	..	..	..	..	—15,120,279
Net Deficit ..	..	..	..	..	—23,255,586

This deficit is not a charge on the taxpayer. It has been met from the Board's resources and it must be overtaken in later years. It could have been covered out of price, but instead the Board incurred a deficit which will serve as an incentive to future economies. A joint stock company could have covered part of the deficit by not distributing any dividends. This expedient was not open to the Board. Although the Board have the duty of covering their costs over an average of good years and bad, they must make repayments of capital and interest to the Government each year whether good or bad. In 1947, the Board had thus to pay to the Government about £15,000,000 for interest on compensation stock and for "interim income" to be passed on to the former owners. They were also obliged to incur a loss of more than £1,500,000 through importing American and Polish coal at the Government's request.

Capital Expenditure

548. On capital account the Board spent nearly £19,000,000 during 1947. Apart from the cost of assets which the Board had to take over on 1st January, 1947, but which did not vest in the Board by virtue of the Nationalisation Act, capital expenditure amounted to about £16,000,000. This sum included the cost of replacing capital assets, but most of it represented additions and improvements. The preparation of the Board's long-term plans for the industry has been described in Chapter X. It will be some time before the final programme is drawn up. In the meantime there are many projects with which the Board can go ahead. Schemes had been prepared by the colliery companies, and the Board adopted many of these with or without revision. At the end of the year the Board's commitments on capital account amounted to £36,000,000 which will be expended over a period of several years. The rate of expenditure will increase, but the resources available to the Board, which include £109,000,000 out of the total of £150,000,000 which may be advanced by the Minister of Fuel and Power between July, 1946, and July, 1951, are likely to be enough to finance capital expenditure during that period. The reconstruction of the collieries has begun at a time when prices result in heavy capital costs. If coal is to be produced cheaply in future, the mines must be reconstructed, but the capital charges will represent a heavy burden. Schemes being prepared

for new collieries show that the annual charge for depreciation and interest may be about 5s a ton. If the Board are to meet these charges, and to produce coal at prices which will be competitive in the world markets they must have the full co-operation of everyone in the industry. Without this co-operation the outlook for the industry and those who earn their living from it is bleak indeed.

The Year in Retrospect

549 In 1947 the National Coal Board had to do many things at once. They had to take over the various staffs and the multitudinous assets of their predecessors. They had to run the industry, and run it at a most difficult time, and they had to begin to plan for the future.

550 In building up their organisation they had to settle the principle—responsibility for policy at the centre and devolution of managerial responsibility to the parts—find accommodation, appoint staff and mould the whole into a new public service. In taking over the industry they had to make sure that there was no interference with production or dislocation of marketing arrangements. Banking accounts had to be opened and financial control established. The Board had to determine their policy towards their employees, decide which Unions to recognise and build up conciliation and consultation schemes. Agreements were negotiated with employees—for a five-day week, for the extension of working hours, for an increase in the minimum wage, and several others. The Board had to take over the detailed control of coal supplies from the Government, consider their policy towards distributors, exporters and organised consumers, and make up their minds what to do about contracts and prices. New scientific and welfare organisations for the industry had to be set up. In a year which began with the fuel crisis and ended with the resumption of exports, everything possible was done to increase output, more labour was taken on—British and foreign—and trained, more machinery was installed, and both men and machines were concentrated where they could produce more coal. Efforts were made to produce cleaner coal. Coal was imported from America and Poland. Plans were made to avoid a transport crisis in the winter, and the resumption of exports meant lengthy negotiations with overseas customers. During all this activity the Board had also to be thinking of the future. Research organisations and planning staffs were set up, detailed reconstruction schemes were worked out, work was begun on a new price structure, and the outline of a co-ordinated plan for the future development of the industry began to take shape.

551. This report is about an important year in the history of Britain's coal-mining industry. It has described events and policies in an impersonal way. But history is made by people; institutions are no more than the framework within which they make it. The Board feel that they cannot conclude their report without a word about the men and women of the industry. Great demands have been made upon them during the first year of national ownership—on the Divisional Boards and staffs, on the Area General Managers and their staffs, on the managers and under-managers, on the colliery officials and, not least, on the mineworkers themselves; demands not only for hard work but for a conscious change in long-standing habits and attitudes of mind. From the manifold employees of the industry in their various occupations, from the highest to the humblest, there came a real response. To all employed in and about the pits, at the industrial plants, training centres, laboratories and offices, to all who daily strive to help the industry to help the nation, the Board express their appreciation and their grateful thanks.

NATIONAL COAL BOARD
ACCOUNTS FOR THE YEAR ENDED 31st DECEMBER, 1947

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NATIONAL COAL BOARD

THE BOARD'S ACCOUNTS FOR YEAR 1947

Explanatory Notes

1 GENERAL

Section 31 of the Coal Industry Nationalisation Act, 1946, provides that the Board's annual statement of accounts shall be prepared in such form as the Minister of Fuel and Power may direct, being a form which shall conform with the best commercial standards and which shall distinguish the colliery activities and each of the main ancillary activities of the Board. The accounts have been prepared in accordance with a direction issued by the Minister on 23rd June, 1948—see Appendix VI.

The form of the accounts is designed to provide full information about the Board's financial affairs. The accounts comply with the provisions of the Companies Act, 1947, in so far as they are appropriate, but the information given far exceeds that required by the Act.

The "main ancillary activities" of the Board have been defined, in accordance with the direction from the Minister of Fuel and Power, as:

Coal Selling Depots	Brickworks and Tileworks
Coke Ovens	Railway Wagons
Secondary By-Product Plants	Wagon Repair Shops
Manufactured Fuel Plants	Houses
Briquetting Plants	Estates and Farms

The accounts consist of a simplified form of Balance Sheet and a Profit and Loss Account. Fuller particulars of the assets and liabilities are given in Schedules I to VIII while information supplementing the items in the Profit and Loss Account is contained in Schedules IX to XIII. Schedule XIV contains particulars of receipts and payments by the Board in winding up the accounts of the Coal Commission.

In future years the accounts will contain comparative figures for the previous year.

2. BALANCE SHEET

The Board's financial position as at 31st December, 1947, may be summarised as follows —

	<i>£ millions</i>
Fixed Assets	263.5
(Incomplete total pending the determination of compensation payable for all assets vested in the Board).	
Suspense Account	1.9
Investments	2.3
Current Assets less Current Liabilities	69.2
	<hr/> 336.9
Deduct Deferred Liabilities	25.4
	<hr/> 311.5
Deduct Capital Liabilities (Incomplete total)	331.8
	<hr/>
Deficit	20.3
	<hr/> <hr/>

This deficit of £20·3 millions was made up of the deficiency to 31st December, 1946 of £0·2 millions and the deficiency for the year 1947 of £23·2 millions, less a Reserve Fund of £3·1 millions. The various items are explained in the following notes.

3. PROFIT AND LOSS ACCOUNT

The Board's operating losses less profits for the year 1947 amounted to £6,187,300 and the profits and losses on the main activities in each Division are summarised in Schedule IX. Other charges in the Profit and Loss Account are the provision for Compensation for Loss of Office of £406,192, the losses on coal imported from America and Poland of £1,697,992, and the Interest Payable less Receivable of £59,803, which consisted mainly of Interest on Hire Purchase Agreements relating to Houses. There are deducted the Income from Investments of £31,332 and Other Income of £124,845, which consisted mainly of compensation received for loss of profits on coal requisitioned by the Ministry of Fuel and Power for working by opencast methods which would otherwise have been available to be worked by the Board. The loss for the year amounted to £8,195,110.

To the loss for the year there have to be added the amounts of Interest and Interim Income payable to the Minister of Fuel and Power. The Interest amounted to £2,660,476, as follows—

Interest on Treasury Stock charged to the Board	£1,961,425
Interest on Capital Outlay Refunds	363,800
Interest on Advances by the Minister of Fuel and Power	335,251
	<hr/> £2,660,476 <hr/>

As explained in Chapter VIII of the annual report the Board are to be charged by the Ministry of Fuel and Power with the amounts of Interim Income payable to colliery concerns and others for the years 1947 and 1948 in lieu of interest on outstanding compensation. Although all claims have not yet been made, the total amount payable for the year 1947 is estimated to be £12,400,000 (gross).

The Interest and Interim Income represent payments on the capital invested in the Board and although comparable in this respect to the dividends payable by commercial concerns, they have to be paid irrespective of the Board's profit or loss. When the Interest and Interim Income of £15,060,476 is added to the loss of £8,195,110, the deficiency for the year amounts to £23,255,586.

The Board's financial results are discussed in Chapter XI of the Report.

4. FIXED ASSETS (Schedules I(a), I(b), and I(c))

The Fixed Assets as at 31st December, 1946, amounting to £81,228, represented the written-down values of the property and equipment purchased by the Board during 1946.

It is not yet possible to show the values of all the Fixed Assets which vested in the Board on 1st January, 1947, as District Valuation Boards have not determined the amounts of compensation to be paid to the former owners. The Fixed Assets which vested in the Board in accordance with the Act may be divided into the following groups:—

- (a) *Collieries*—The collieries have been valued at a "global sum" of £164,660,000, in accordance with Section 10 of the Nationalisation Act. This sum has not yet been apportioned between the Districts and the colliery concerns, and it is not possible to allocate it between the various types of assets at the collieries.

- (b) *Fixed Assets of the Coal Commission*.—Minerals owned by the Coal Commission vested in the Board with the other fixed assets of the Coal Commission. In accordance with Sections 28 and 32 of the Act, the Board have been charged with an amount of £78,457,089, representing the value of Treasury Stock issued in exchange for Coal Commission Stock. Of this sum, amounts of £8,000 and £6,720 have been allocated to Freehold Properties and Office Equipment respectively, and the balance of £78,442,369 has been appropriated as the book value of the minerals.
- (c) *Capital Outlay Refunds* —Capital Outlay Refunds made by the Minister of Fuel and Power in accordance with Section 18 of the Act have been charged to the Board in accordance with Section 28, and the amount charged up to 31st December, 1947 (including interest for periods up to 31st December, 1946) amounted to £17,233,954. Of this sum, it is estimated that £61,631 represented items in stock at 1st January, 1947, and this has been charged to Stock Account, the balance of £17,172,323 appearing in Fixed Assets. Refunds have continued to be made during 1948, but the payments after 31st December, 1947 are not expected to reach £1,000,000. The capital outlay refunds were made by the Minister in respect of capital expenditure incurred by colliery concerns between 1st August, 1945 and 31st December, 1946, and the relevant assets vested in the Board on 1st January, 1947. It has not yet been possible to analyse the amount paid according to the different types of assets in respect of which the payments were made and to the different activities in which they were used.
- (d) *Ancillaries* —The word “Ancillaries” is used to describe the activities other than collieries which have vested in the Board, and which are described in Section 10 of the Act as “subsidiary interests”. No values can yet be attached to the Fixed Assets of the ancillaries, as the compensation payable has not been determined by District Valuation Boards.
- (e) *Interests under a former freeholder's lease of minerals* —When minerals were acquired by the State and vested in the Coal Commission in accordance with the Coal Act 1938, some colliery concerns which owned freehold minerals took leases of the minerals at “peppercorn” rents instead of receiving compensation. The interests of these colliery concerns in the leases have vested in the Board but cannot yet be valued, as the compensation payable has not been determined by District Valuation Boards.
- (f) *Compensation for Severance*.—In accordance with Section 17 of the Act, compensation is to be paid in cases where through the severance of interests resulting from the Act there has been an increase in the overhead expenses applicable to the business of a company or other person not vesting in the Board. The Compensation payable has not yet been determined by District Valuation Boards, but will eventually constitute an addition to the cost of Fixed Assets.

When particulars are available, the values of assets vesting in the Board will be analysed both in respect of the activities for which the assets are used (Collieries, Coke Ovens, etc.) and the types of the assets (Land, Buildings, Plant and Machinery, etc.). Full particulars will then appear in the Annual Accounts.

The additions to Fixed Assets during the year 1947 amounted to £18,833,976, and after deducting disposals of £479,504, the net additions totalled £18,354,472. In Schedule I(b) the additions and disposals are analysed according to the

activities for which they are used in each Division. Particulars are also shown of the net additions in each Division, analysed according to the types of assets.

The additions of £1,076,135 in the column headed "Items not allocated to Divisions" represent the estimated cost of plant purchased from the Ministry of Fuel and Power which is held at collieries, but the cost of which will not be allocated to Divisions until the purchase price is settled. The disposals of £161,217 in the same column consist of Royalties received for the Opencast Working of minerals owned by the Board.

The capital expenditure of £18,833,976 included £2,904,136 in respect of purchases as at 1st January, 1947 of assets which did not vest in the Board under the Act. The main items were .—

- (a) Colliery plant owned by the Ministry of Fuel and Power and hired to colliery concerns
- (b) Interests of Housing Associations in colliery houses. In many cases the houses were owned by Housing Associations, and there vested in the Board only the colliery concerns' interests in what were, in effect, hire-purchase agreements. The Board and the Housing Associations thought it desirable to terminate the agreements so that the Board would own the houses.

The disposals of fixed assets amounting to £479,504 were of minor importance. They consisted mainly of the value of plant scrapped or sold and of railway wagons sold on being de-requisitioned as unfit for main line traffic. The normal accounting practice on the disposal of a fixed asset is to deduct from the total cost of fixed assets the original cost of the asset sold. In this case, as the original costs have not yet been ascertained, the actual proceeds of sale have been deducted, but the respective amounts are unlikely to differ materially.

The unexpended balance of capital expenditure authorisations at 31st December, 1947 amounted to £36 millions. When the collieries and other activities vested in the Board on 1st January, 1947, many schemes of capital expenditure were in hand, and most of them have been continued by the Board. The schemes costing over £50,000 had been approved by the Minister of Fuel and Power before the vesting date. The total unexpended authorisations at the vesting date on schemes taken over from the former owners amounted to £27.0 millions. During the year 1947, the Board authorised capital expenditure amounting to £27.8 millions, and actually expended £18.8 millions, so that the balance of unexpended authorisations at the end of the year amounted to £36 millions. Of this balance, only a small proportion consisted of contractual commitments; the expenditure will be incurred over several years.

Particulars of the provisions for the depreciation and amortisation of fixed assets appear in Schedule I (c). Until the compensation payable to the former owners is determined and allocated between the different types of assets, no accurate depreciation provisions can be computed. It has, however, been necessary to make approximate provisions for depreciation by reference to the best available information. In computing these provisions regard has been had to .—

- (a) Provisional estimates of the amounts of compensation which may be payable for the Fixed Assets and the expenditure on Fixed Assets during 1947.
- (b) The types of assets covered by the compensation, ranging from land and minerals to buildings, plant and equipment.
- (c) The probable effective lives of the assets.

The total provision for depreciation and amortisation for the year 1947 amounted to £15,232,184, of which £12,514,473 related to collieries and £2,717,711 to ancillaries.

The determination of the Board's depreciation policy must be deferred until full information is available as to the compensation payable for the assets.

The written-down values of fixed assets, so far as they are known, amounted to £263,492,928 at 31st December, 1947, which represented the cost to the Board of £278,726,346 less accumulated depreciation provisions of £15,233,418.

5. SUSPENSE ACCOUNT

Of the Holiday Payments made to workmen in 1947, sums totalling £1,917,779 were regarded by the Board as having accrued before the vesting date and thus constituting liabilities of the former owners of the collieries. The apportionment of Holiday Pay is being disputed by the Mining Association acting on behalf of colliery concerns. Pending a settlement of the dispute, the amount of £1,917,779 has been charged to a Suspense Account. If the Board should be unable to recover this sum, it would effectively represent an addition to the compensation payable to the former owners of the collieries, to be capitalised in the Board's Accounts as a full year's Holiday Pay has been charged in the Profit and Loss Account for the year 1947.

6. INVESTMENTS (Schedule II)

The Board's investments fall into two groups, those which vested in the Board from the Coal Commission, and the investments in the British Coal Utilisation Research Association.

The book value of Government Securities of £2,193,776 compares with a market value on 31st December, 1947 of £2,203,657.

In conjunction with combustion appliances manufacturers and others, including the Department of Scientific and Industrial Research, the Board have financed the operation of the British Coal Utilisation Research Association. When the Board took over the interests of colliery concerns in the B.C.U.R.A. on 1st January, 1947, substantial development schemes were in progress, for which capital had not been fully provided. It was therefore arranged that the Board should advance to the Association the sum of £70,000, of which £60,000 should be the subject of a First Debenture secured on freehold property, and £10,000 should be the subject of a Second Debenture secured on the assets of the subsidiary company C.U.R.A. Patents Ltd., and all the other assets of the Association. The Debentures carry interest at $3\frac{1}{2}$ per cent. and $4\frac{1}{2}$ per cent. per annum respectively and are repayable at six months' notice. According to the audited Balance Sheet of the British Coal Utilisation Research Association as at 31st December, 1947, the assets and liabilities of the Association consisted of —

						£
Fixed Assets (at written-down values)	..	..				180,022
<i>Deduct</i> Current Liabilities less Current Assets	:					12,544
						<hr/> 167,478
Less Debentures	..	..	..	..	..	70,000
						<hr/>
Surplus	..	..	..	..	..	£97,478
						<hr/>

7. STOCKS. (Schedule III)

The Board's stocks of products, stores and materials at 31st December, 1947, amounted to £48,067,956.

The stocks of products and of consumable or spare stores owned by colliery concerns vested in the Board on 1st January, 1947. Consumable or spare stores were defined in the First Schedule to the Nationalisation Act as follows —

“ ‘ consumable or spare stores ’ means any consumable stores, including supplies of timber or of materials of any kind, and moveable property which is surplus to ordinary requirements and which has not at any time been issued for use or as a standby, so however that property surplus to ordinary requirements shall not be treated as falling outside this definition by reason of its having been so issued if it has been withdrawn on being found unnecessary or unsuitable for the purpose for which it was so issued or on the substitution of other property therefor ; ”

The stocks have to be valued by the District Valuation Boards, and the arrangement made was that inventories should be prepared by the colliery concerns and copies supplied to the National Coal Board. The values cannot finally be determined until the District Valuation Boards have examined the inventories. Meanwhile, with the concurrence of the Minister of Fuel and Power the Board have endeavoured to reach agreement with the colliery concerns on the extent to which both parties would regard the inventories as acceptable. There are many points of difficulty in connection with the determination of the stocks which are covered by the definition in the Act, and for which compensation is to be paid, and in assessing the values to be placed on these stocks. The difficulties relate particularly to the interpretation of the definition of “ consumable or spare stores ” quoted above, and to the valuation of ground stocks of coal, which consisted mainly of inferior qualities.

In having to prepare accounts containing values of stocks both at the beginning and the end of the year, before the values of the opening stocks have been determined by District Valuation Boards, the Board were placed in some difficulty. They decided to adopt the amounts of the inventories rendered by colliery concerns as the values of the opening stocks, subject to adjustment only for palpable errors or corrections acceptable to the colliery owners. They have then taken stock on similar lines at the end of 1947. Thus, for items held in stock, both at the beginning and end of the year, any adjustment which may eventually be made to the opening stocks will affect also the closing stocks, and is unlikely to affect the Board's Profit and Loss Account. Where stocks held at the vesting date have been sold or consumed during the year 1947, the Board's Profit and Loss Account will be affected by differences between the opening values brought into account and those which may eventually be determined by District Valuation Boards.

Subject to this comment with regard to stocks which vested in the Board on 1st January, 1947, and remained in stock on 31st December, 1947, the general basis of stocktaking and stock valuation as at 31st December, 1947, has been as follows .—

(a) *Stocks of Products* .

Quantities of stocks of products were subject to physical ascertainment, and have been verified by subsequent disposal in almost all cases except ground stocks. In accordance with general practice in the coal and coke industries, stock of products have been valued at market prices ruling on 31st December, 1947, subject to deductions for expenses to be incurred in rendering the product saleable and marketing it. Ground stocks of coal remaining unsold out of stocks existing at 1st January, 1947, have been valued at the same price as that used by the former

owners in the vesting date inventory, namely, their estimate of the market price at that date as between a willing buyer and a willing seller.

(b) *Stocks of Stores*

Stocks of stores were verified physically and were valued at cost or market value, whichever was lower. In attributing values to used, damaged or obsolete stocks, regard was had to market value and to the condition of the stocks.

Although the Board have temporarily adopted the policy of including in stocks of products and consumable or spare stores all those items covered by the definitions in the Nationalisation Act, the matter will be reconsidered when District Valuation Boards have completed their work.

During the year 1947 stocks of products and stores increased from £39,383,189 to £48,067,956, an increase of 22.1 per cent. The greater part of the increase resulted from rising prices, as between December, 1946, and December, 1947, the wholesale price index of industrial materials and manufactures increased from 186.4 to 214.2, an increase of 14.9 per cent.

Stocks of coal consisted mainly of ground stocks of inferior value. The total coal stocks of 7,542,444 tons greatly exceed the coal stocks recorded in official statistics, because of large tonnages of slurry and other inferior fuels on the ground, which are not taken into account in the official statistics. District Valuation Boards may attach no values to some of these stocks, in which case adjustments of both opening and closing stocks will be required.

The Board's stocks of consumable or spare stores are heavy. It has not yet been possible to concentrate stocks in most cases, because of the difficulties in providing accommodation and equipment. Moreover, progress with standardisation of plant and equipment is necessarily slow and until substantial progress has been made large stocks of spares will be needed. Delivery delays have also made heavy stocks necessary in some cases.

The spare plant held by the Board at 31st December, 1947, amounted to £6,519,336. There may well be a material reduction in this figure when outstanding questions on vesting date stocks have been settled and items are deleted both from the vesting date stocks and from those held at 31st December, 1947.

The coal stocks of £9,921 which appear in the column headed "Headquarters and National Stocks" consisted of imported coal, in transit. The amount of £166,698 in the same column for Stores and Materials represented Central and Headquarters Stocks of Colliery Plant, Imported Belting, Office Machinery and Stationery.

8 DEBTORS AND BILLS RECEIVABLE (Schedule IV)

The Board's Debtors amounted to £67,274,111 on 31st December, 1947. Schedule IV contains particulars of the main classes of debtors and their Divisional distribution. Bills Receivable amounted to £110,768.

Trade Debtors amounting to £51,785,594 consisted of sums owing to the Board in respect of sales and services.

The amount of £1,358,249 owing by colliery concerns and associations referred mainly to settlements between these bodies and the Board as at the vesting date, when extensive apportionments were necessary.

Amounts owing by colliery concerns and others in respect of Workmen's Compensation liabilities transferred to the Board, totalling £12,448,128 (*see* paragraph 11 below) were made up as follows —

Provisional valuation of Outstanding Cases,		
1st January, 1947	.. .. .	21,000,000
Less Payments on Account during 1947	.. .	8,918,019
		<hr/>
		12,081,981
Add Accrued Interest	. . . . .	366,147
		<hr/>
Estimated Amount Owing, 31st December, 1947		12,448,128
		<hr/>

Payments in Advance amounting to £733,331 consisted mainly of such items as rent and rates, in respect of which payments made on or before 31st December, 1947, related wholly or partly to subsequent periods

Income Tax Recoverable of £147,480 represented tax deducted from rents and interest receivable, less deductions from rents and interest payable. As the Board have no taxable profits for 1946 and 1947, the amount of £147,480 will be reclaimed from the Commissioners of Inland Revenue.

Deposits amounting to £51,016 were swollen by the inclusion of £28,372 in respect of a single colliery in Northumberland, where the Board succeeded to an arrangement by which the approximate amount of the National Insurance liability for a period of six months was paid in advance to the Ministry of National Insurance as part of an arrangement for half-yearly stamping of insurance cards. This has now been discontinued.

Secured Loans to officials and staff amounted to £31,404, and consisted entirely of advances for the purchase of motor cars and houses. The loans are repayable to the Board during a fixed period and there are no arrears of repayments.

The "Other Debtors" amounted to £718,909, and consisted of sums owing to the Board which do not fall within the category of trade debtors.

Provisions for bad and doubtful debts and for discounts and allowances, which have been deducted from debtors, amounted to £179,891. It has been thought desirable to provide a minimum amount as a provision for bad and doubtful debts in all cases, even though trade debts outstanding at 31st December, 1947, have almost all been collected in full since that date. The provision for discounts and allowances is small, as few cash discounts are allowed by the Board and the allowances made in respect of quality or weight are small in proportion to the total turnover.

Bills Receivable outstanding on 31st December, 1947, amounted to £110,768. They consisted of £106,252 in respect of bills from customers for the sale of coal (in continuation of arrangements made by colliery concerns before nationalisation) which were in transit for discounting on 31st December, 1947, and £4,516 in respect of foreign sales of by-products. In addition, Bills Receivable totalling £1,330,438 had been received from customers for the sale of coal (in continuation of pre-nationalisation arrangements) and had been discounted. All the bills were honoured on the due dates.

9. CASH AND BANK BALANCES

Cash Balances on 31st December, 1947, amounted to £184,851 and consisted of the balances held at all offices of the Board for current requirements.

Bank Balances on 31st December, 1947, amounted to £2,582,461. There were also overdrafts on accounts with some Banks.

10. CAPITAL LIABILITIES (Schedule V)

The Board's capital liabilities are summarised in Schedule V, and the general arrangements under which the Board is financed are described in Chapter VIII of the Report.

The amounts of capital liabilities shown in Schedule V are incomplete, as compensation for many of the assets vested in the Board has not yet been determined. In the case of Capital Outlay Refunds the amounts paid by the Minister of Fuel and Power up to 31st December, 1947, have been brought into the Accounts. The liability in respect of compensation for stocks of products and stores has been brought into account provisionally at an amount based on the inventories rendered by the former owners. In the case of ancillary properties, however, it is not possible to show any estimate of the compensation payable.

All the liabilities shown in Schedule V relate to the Board's initial capitalisation, except the sum of £33,085,000 which has been advanced by the Minister of Fuel and Power in accordance with Section 26 of the Act in respect of expenditure properly chargeable to capital account, including the provision of working capital. The total expenditure qualifying for advances was £48,752,326, as follows —

Capital Expenditure for the Years 1946 and 1947	..	£	18,916,438
Working Capital as at 31st December, 1947—		£	
Current Assets	..	118,040,256	
Less Stocks of Products and Stores vesting in the Board which are being financed under the Compensation provisions of the Act	.	39,383,189	
		78,657,067	
Less Current Liabilities	.	48,821,179	
			29,835,888
Total	.		£48,752,326

Thus the expenditure qualifying for advances exceeded by £15,667,326 advances of £33,085,000

The Board's capital liabilities will increase substantially when all compensation has been paid to the former owners for assets vesting in the Board

There are shown in Schedule V particulars of each of the Terminable Annuities covering interest and capital repayments to the Minister of Fuel and Power. All these Terminable Annuities are for periods of 50 years and the rate of interest payable in each case appears in the Schedule.

11 PROVISIONS FOR DEFERRED LIABILITIES (Schedule VI)

(a) *Workmen's Compensation*(1) *Pre-vesting date cases (Item 1 (a))*

The Coal Industry Nationalisation Act contained no provisions for the transfer to the Board of the outstanding liability of colliery concerns and others in respect of Workmen's Compensation payable to workmen employed in activities which vested in the Board. It had been agreed between the Ministry of Fuel and Power and the colliery owners that the Board would negotiate with the colliery owners for the transfer of liabilities on payment by the owners of sums to be agreed. These

negotiations were completed, and it was arranged that the sums to be paid should be settled between the Government Actuary acting on behalf of the Board and Actuaries, nominated by those formerly responsible for the liabilities. The valuations have not yet been completed, but for the purpose of the Accounts the Government Actuary has estimated that on the basis of draft valuations submitted to him by the Owners' Actuaries, the amount to be paid to the Board by the former owners is likely to be approximately £21,000,000. To this amount, representing liabilities as at 1st January, 1947, there has been added interest for the year 1947, as the valuations were based on the value at the vesting date of the payments finally to be made, and there have been deducted payments to workmen during the year. There has also been added an additional provision of £378,954 by reason of the probability that the policy of the Board will result in payments exceeding those which would have been made by the former owners, on the basis of which the valuations of outstanding liabilities at the vesting date will be agreed.

The effect is that the balance of £17,528,333 shown in Schedule VI represents the result of the following transactions —

	£
Provisional valuation of Outstanding Cases, 1st January, 1947	21,000,000
Additional Provision	378,954
	<hr/> 21,378,954
Less Payments to Workmen during 1947	4,181,763
	<hr/> 17,197,191
Add Interest on outstanding balance of provision during 1947	331,142
	<hr/> £17,528,333
Balance of Provision 31st December, 1947	<hr/>

This amount will fall due for payment over a considerable number of years. It is understood that the Minister of National Insurance does not propose to take over existing cases when the Industrial Injuries Act is brought into effect in July, 1948.

The amounts of the valuations of outstanding workmen's compensation liabilities at 1st January, 1947, with interest, have been paid or will be payable by colliery concerns and others when the valuations have been completed. The estimated sums due to the Board as at 31st December, 1947, are shown as item 3 of Schedule IV and are explained in paragraph 8.

(u) 1947 Cases (Item 1 (b))

The amount of £6,795,386 provided in respect of cases arising during the year 1947 represents estimates by the Board's officials of the amounts of compensation which will eventually be payable in respect of accidents occurring and cases of industrial disease arising during 1947, less payments actually made during the year. As in the case of the provision for pre-vesting date cases, payments will be made over a considerable number of years.

(b) Surface Damage (Item 2)

Section 48 of the Coal Industry Nationalisation Act provides that subsidence liabilities outstanding as at 1st January, 1947, should, subject to certain exceptions, vest in the Board. The result of this

provision was that the settlement of subsidence matters with the former colliery owners was virtually on a cash basis, leaving subsidence liabilities accrued and accruing on the vesting date as an obligation of the Board

The Board consider that it would be unsatisfactory to prepare their accounts on a similar basis and are building up a provision so that eventually each year's revenue will bear the cost of surface damage likely to result from the working of the coal during that year. The amount provided during 1947 in excess of the claims met in that year was £220,811

(c) *Compensation for Loss of Office* (Item 3)

As explained in Chapter III of the Report, the Board will have substantial liabilities in respect of compensation to officials and staff formerly employed in the coal industry who have suffered loss as a result of nationalisation. As the accounts for the first half of 1947 have been charged with substantial sums in respect of salaries during the period of or in lieu of notice, a provision for compensation has been charged as from 1st July, 1947, at the rate of 1d per ton saleable. The balance at 31st December, 1947, of £296,545 represented the provision for the half-year ended 31st December, 1947, less payments of £109,647 made up to 31st December, 1947.

(d) *Re-building of Coke Ovens and Kilns* (Item 4)

It is customary to regard the cost of re-building coke ovens, kilns, etc., as a revenue charge, but the expenditure is incurred at infrequent intervals. In the circumstances, it has been thought desirable to build up provisions so that sums required will be available when re-building or re-lining becomes necessary, having regard to the estimated costs and the dates on which the work is likely to be carried out. The balance of £270,911 represents the provisions made during the year, less the amounts expended

(e) *Insurance Fund* (Item 5)

The Board have adopted the general policy of carrying their own insurance risks, although some policies of the former owners continued in operation during the year 1947. Sufficient provisions are being made in the Board's Profit and Loss Account to make available sums estimated to exceed the amounts of claims, so that over a period of years an adequate Insurance Fund will be built up. The balance of the fund appearing in Schedule VI, amounting to £325,733 represented the difference between the provisions during the year of £622,385 and claims of £296,652 (including premiums paid to outside Insurers).

12. CURRENT LIABILITIES (Schedule VII)

The General Creditors for supplies and services amounting to £17,853,963 consisted almost entirely of charges for supplies and services during the latter part of 1947

Amounts totalling £285,606 were owing to colliery concerns and associations. There were extensive apportionments between these bodies and the Board as at the vesting date, and in some cases the provisional settlements showed balances due by the Board.

The amount of £12,400,000 for interim income owing represents the sum due for the year 1947, as explained in paragraph 3.

The Accrued Charges consisted mainly of wages amounting to £6,961,842. This sum represented the wages for the week ended 27th December, 1947, and for the part week to 31st December, 1947, which were paid early in January. Other accrued charges, amounting to £4,074,154 consisted of the proportions of charges for services (rent, rates, national insurance, etc.) which were payable after 31st December, 1947, but related partly to the year 1947, and a provision of part of the Holiday Pay to be disbursed in 1948.

Other Creditors amounted to £6,408,252 and consisted of the various items owing by the Board other than those mentioned above. The main items were estimates of sums due to the Minister of Fuel and Power in respect of colliery plant taken over by the Board from the Minister, for which a settlement had not been reached as at 31st December, 1947, and Income Tax deductions from wages and salaries payable to the Commissioners of Inland Revenue. There was also included an amount of £873,636 in respect of Superannuation, representing the excess of the Board's estimated liability for 1947 over the contributions paid. This large balance resulted from the delayed assimilation of staff to the Superannuation Fund, as in most cases membership will be effective as from 1st January, 1947, and provision has to be made for the contributions payable by the Board in respect of the year.

Bank overdrafts amounted to £837,362 on 31st December, 1947. The Board's arrangements with the Banks do not provide for overdrafts and the amounts in question represented cheques drawn by the Board during the last day or two of December for which funds were not available in the Banking Accounts on 31st December, although funds were provided before the cheques were presented. It is not possible to analyse the total by Divisions, as overdrafts in one Division have to be set off against balances held by the same Bank in other Divisions.

13 RESERVE FUND. (Schedule VIII)

Attention has been drawn in Chapter VIII of the Report to the provisions of the Nationalisation Act relating to the establishment of a Reserve Fund.

In accordance with Section 38 of the Act and the Coal Commission (Dissolution) Order (S.R. & O., No. 396 of 1947) the Reserve Fund of the Coal Commission was made up to 29th March, 1947, and the balance at credit of the Fund was transferred to the Board. This balance amounted to £3,113,256 and constituted the nucleus of the Board's Reserve Fund. The Board consider that a substantial Reserve Fund should be built up as soon as possible, but have not been able to make any allocations to the Fund during the year 1947.

As at 31st December, 1947, part of the Reserve Fund was used in the Board's business and the remainder continued to be invested in Government securities.

14. SUMMARY OF OPERATING PROFITS AND LOSSES (Schedule IX)

The Summary of Operating Profits and Losses (Schedule IX) shows the profits and losses in each Division of the main activities of the Board. The results of other activities have been aggregated and include various types of activities which vested in the Board, but which are of minor importance.

In preparing the accounts, proper transfers, based on market prices, have been made in respect of sales and services by one activity to another and activities have been charged with their appropriate proportions of the overhead and other general expenses of the Board.

The profits and losses shown are after providing for depreciation, but before charging interest and interim income. Colliery losses amounted to £9,203,905 and profits on ancillary activities to £2,961,923. Royalties receivable less payable from licensed mines amounted to £54,682. The net operating loss totalled £6,187,300.

Collieries

Full particulars of the colliery losses, amounting in total to £9,203,905, for each Division and Area are shown in Schedule X. The results are discussed in Chapter XI of the Report.

The costs include the appropriate proportion of all the Board's administrative expenses, including Headquarters expenses, but the loss shown does not take into account the liability for interest and interim income.

The final amounts of profits and losses are equal to the aggregate of the figures shown in the four quarterly statements already published. There is, however, one difference in the analysis of costs. In the quarterly statements the gross wages were shown as wages, in order to maintain continuity with previous statements. In the Board's accounts, however, the amounts of wages applicable to power, heat and light, repairs and renewals, etc., have been included under the appropriate heading and these transfers reduce the cost of wages by approximately 5d per ton.

Coal Selling Depots

The coal selling depots, which earned a profit of £58,515, consist of depots for the wholesale and retail distribution of coal situated away from the collieries. Where direct distribution of coal is undertaken at the collieries, the transactions have been brought into the colliery profit and loss accounts. Transfers of coal from the collieries to the selling depots have been charged at the price appropriate to sales to distributors in similar circumstances.

Coke Ovens (Schedule XI)

Throughout 1947 there was a heavy demand for coke, and the coke ovens operated at full capacity, the profits amounting to £925,555, or 3s. 1·3d. per ton of coke produced. Financial results varied considerably, as although some of the plants which vested in the Board were modern plants in good condition, others will not operate profitably until they have been reconstructed. The increases in coke oven costs during 1947 have not been covered by increases in selling prices and there has been a diminution in the profit margin.

Detailed coke oven profit and loss accounts appear in Schedule XI. In addition to depreciation, provision has been made for the rebuilding of coke ovens, as although this work is carried out at long intervals, the expenditure is customarily regarded as a revenue charge.

Secondary By-product Plants

The chief products of the secondary by-product plants, which earned profits of £147,207, are summarised in Chapter VI of the Report. Most of the plants have operated at a satisfactory rate of profit during 1947.

Manufactured Fuel Plants

The only working manufactured fuel plant which vested in the Board was the Phurnacite Plant of Powell Duffryn, Ltd. The products have been in heavy demand and a profit of £57,996 was earned during the year.

Briquetting Plants

Nineteen briquetting plants vested in the Board on 1st January, 1947 and during the year ten other plants were bought from the Ministry of Fuel and Power, as explained in Chapter VI of the Report. Almost all the plants have earned profits and the total profit for the year amounted to £228,409.

Brickworks

Eighty-three brickworks and two pipe works vested in the Board and they varied greatly in capacity, equipment and condition. In most cases they have been operated successfully, the total profits amounting to £122,847

Railway Wagons

There vested in the Board on 1st January, 1947, railway wagons operating on the main line and those used internally at collieries and other activities. The main line wagons continued under requisition to the Ministry of Transport, the Board receiving hire rents in accordance with the official schedules. After deduction of depreciation and other charges, the net profit on main line wagons amounted to £1,203,407, but these wagons vested in the British Transport Commission on 1st January, 1948, and after that date the profits will not be available to the Board.

Internal wagons are accounted for as a Service Department, the charges to the activities using them being fixed to cover the operating expenses.

Wagon Repair Shops

The Wagon Repair Shops which vested in the Board have continued to repair both main line and internal wagons. The charge made for the repair of internal user wagons does not include profit, but the main line wagon repairs have been executed on behalf of the wagon pool of the Ministry of Transport and have been charged in accordance with their fixed schedule of prices. The profits on this business amounted to £111,491.

Houses

On 1st January, 1947, 141,000 houses vested in the Board and in almost all cases they were held by colliery concerns for the purpose of providing accommodation for their employees, although in a considerable number of cases they were actually tenanted by others. In some instances the houses are tenanted free by employees of the Board under their conditions of service, in other cases nominal rents only are paid and in some cases ordinary tenancy conditions obtain. For accounting purposes, normal rents for rent-free houses have been credited to the Houses Account, the differences between these rents and those actually receivable being charged to the appropriate activity. Nevertheless, many of the houses are old and in poor condition and in view of the limitation on rents imposed by the Rent Restriction Acts and heavy repair costs, losses have been incurred on the houses in most Divisions. The total loss on houses (after charging depreciation) amounted to £202,653.

Estates and Farms

Under the heading of Estates and Farms are grouped all the various items of land and property owned by the Board other than houses and those used by the various operating activities and service departments. The net revenue from these assets amounted to £90,545, losses being incurred in the North-Eastern and East Midlands Divisions owing to unprofitable farming operations. Most of the farms which vested in the Board were operated by colliery concerns owing to their proximity to the collieries and to the effect on the farm operations of subsidence or smoke damage. For these reasons farm results have been poor.

Other Activities

The net profit on other activities amounted to £218,604.

Licensed Mines. Royalties

The financial arrangements in connection with licensed mines are described in the Board's report for 1946. (See also Chapter VI of the report for 1947) The differential royalties payable in each district have been varied during the year 1947, as a result of changes of circumstances such as the introduction of the five-day week. Royalties receivable exceeded royalties payable during the year by £54,682.

The fixed assets of the licensed mines as at 1st January, 1947, vested in the Board and provision has to be made for depreciation and amortisation. The general provision for depreciation and amortisation is considered to be adequate to cover the fixed assets operated by the Board and those of licensed mines and, pending the determination of the Board's final provisions, no special depreciation provisions for licensed mines are to be made.

15. ANALYSIS OF INCOME AND EXPENDITURE (Schedule XII)

In computing the profits and losses of the Board's various activities which appear in Schedule IX, many internal transactions have been taken into account, including such items as the transfer of coal from collieries to coke ovens and the rendering of services by one activity to another. The aggregation of the Profit and Loss Accounts of all the separate activities would produce inflated figures and therefore an analysis of the Board's income and expenditure on revenue account, which excludes all internal transactions, has been prepared. This analysis appears in Schedule XII and separate particulars are shown for headquarters, for national transactions and for each division.

The analysis is based on the primary nature of the income and expenditure. For example, wages of training staffs appear as "Wages" and not as "Training Expenses." Similarly, the cost of stores consumed during the year appears as "Raw Materials and General Stores" although they may have been used for repairs.

The columns for each Division exclude internal transactions of the Division but include transactions with other Divisions. In the "Total" column, all internal transactions of the Board have been eliminated.

Separate particulars are shown of payments to members of the National Coal Board and of the administrative expenses of the National and Divisional Headquarters.

The Board's total expenditure on Revenue Account (including Interest and Interim Income) amounted to £394,287,103 and consisted of:—

	£	Per cent.
Wages and holiday pay .. .	247,788,443	62.8
Workmen's Compensation and National Insurance .. .	14,727,742	3.7
Materials, stores, power and repairs	71,648,604	18.2
Salaries . . .	13,003,674	3.3
Other expenses .. .	16,397,007	4.2
Depreciation	15,232,184	3.9
Interest and interim income	15,489,449	3.9
	<hr/>	
	£394,287,103	100.00

The total administrative expenses (including salaries) of the National and Divisional Headquarters amounted to £2,436,282 or 0·6 per cent. of the total.

The purchases and sales in the column headed "National Transactions" in Schedule XII relate to coal imported from America and Poland. The charge of £32,000 for Workmen's Compensation in the same column consists of payments to the Pneumoconiosis (Benefit) Scheme, 1943, which was established to provide benefits to workmen who had ceased to be employed in the coal industry before 1st July, 1943.

16 ANALYSIS OF GENERAL EXPENSES (Schedule XIII)

It has been thought desirable to publish a detailed analysis of general expenses (item 15 of Schedule XII). As in the case of the general analysis of income and expenditure, the general expenses shown exclude internal transactions and have been analysed according to the primary nature of the expenditure.

17 RECEIPTS AND PAYMENTS IN WINDING UP THE COAL COMMISSION. (Schedule XIV)

In accordance with Section 38 of the Act and the Coal Commission (Dissolution) Order (S R O. No. 396 of 1947) there is annexed to the Accounts (Schedule XIV) a statement of all sums received or expended by or on behalf of the Coal Commission, the receipt or expenditure of which was not recorded in the final accounts of the Commission for the period ended 31st December, 1946.

NATIONAL BALANCE SHEET AS

LIABILITIES

I Capital Liabilities (<i>Schedule V</i>)	£	£
Outstanding liabilities in respect of amounts charged to the Board by the Minister of Fuel and Power in accordance with Section 28 of the Coal Industry Nationalisation Act —		
(a) In respect of 2½% Treasury Stock (1986–2016) issued in replacement of Coal Commission Stock .. .	77,652,270	
(b) Capital Outlay Refunds	17,031,214	
(c) Suspense Accounts in respect of compensation payable for assets vested in the Board	204,043,189	
Advances by the Minister of Fuel and Power in respect of expenditure chargeable to capital account, including the provision of working capital, in accordance with Section 26 of the Coal Industry Nationalisation Act	33,085 000	
	<hr/>	331,811,673
II. Provisions for Deferred Liabilities (<i>Schedule VI</i>)		
Workmen's Compensation	24,323,719	
Surface Damage	220,811	
Compensation for Loss of Office (<i>see Note 3</i>)	296,545	
Rebuilding of Coke Ovens and Kilns	270,911	
Insurance Fund	325,733	
	<hr/>	25,437,719
III Current Liabilities (<i>Schedule VII</i>)		
Bank Overdrafts	837,362	
General Creditors for Supplies and Services	17,853,963	
Colliery Concerns and Associations	285,606	
Interim Income	12,400,000	
Accrued Charges	11,035,996	
Other Creditors	6,408,252	
	<hr/>	48,821,179
IV. Reserve Fund (<i>Schedule VIII</i>)		
Notes — 1 The compensation payable for some of the assets vested in the Board has not yet been determined. Accordingly the values of Fixed Assets and the Suspense Accounts in respect of compensation payable are incomplete and the values of Stocks of Products and Stores are provisional		
2. There were contingent liabilities of —		
(a) £1,330,438 in respect of Bills Receivable Discounted		
(b) £125,000 for War Damage contributions of the Coal Commission, if and when assessed		

Carried Forward **409,183,827**

COAL BOARD

AT 31st DECEMBER, 1947

ASSETS

I Fixed Assets (<i>Schedules I(a) to I(c)</i>)	£	£	£
At Cost less Depreciation			
Balance as at 31st December, 1946		81,228	
Additions at Cost			
Fixed Assets vesting in the Board on 1st January, 1947, or subsequently in accordance with the Coal Industry Nationalisation Act			
(a) Assets for which compensation has been determined		260,289,412	
(b) Assets for which compensation has not been determined		—	
Purchases during the year ended 31st December, 1947		18,833,976	
		<u>279,204,616</u>	
Less Disposals ..	479,504		
Provision for Depreciation for the year ended 31st December, 1947, of all Fixed Assets, including those for which the compensation payable has not yet been determined	15,232,184		
		<u>15,711,688</u>	263,492,928
 <i>Notes</i> —1 The written down balance of Fixed Assets as at 31st December, 1947, represented —			
Cost	£278,726,346		
Less depreciation	£15,233,418		
	<u>£263,492,928</u>		
2 Capital Expenditure on Fixed Assets authorised but not expended as at 31st December, 1947, amounted to £36,000,000.			
 II Suspense Account			
Proportion of 1947 Holiday Pay claimed from Colliery Concerns which is disputed by them			1,917,779
 III Investments (<i>Schedule II</i>)			
Government Securities (Market Value—£2,203,657)		2,193,776	
Debentures British Coal Utilisation Research Association		70,000	
		<u>2,263,776</u>	

Carried Forward 267,674,483

NATIONAL

BALANCE SHEET AS AT

LIABILITIES

<i>Notes (contd) —</i>	<i>Brought Forward</i>	£ 409,183,827
3. The total amount payable for compensation for loss of office is not yet known. The amount of £296,545 represents the first instalment of a provision to be made during the period of five years from 1st July, 1947, less payments made up to 31st December, 1947.		

HYNDLEY
Chairman

L H H LOWE
Member of the Board

£409,183,827

PROFIT AND LOSS ACCOUNT FOR THE

	£
Operating Losses (<i>Schedule IX</i>)	6,187,300
Provision for Compensation for Loss of Office	406,192
Losses on Imported Coal	1,697,992
Interest Payable less Receivable	59,803
	<u>£8,351,287</u>
Loss for Year, Brought Down	8,195,110
Interest and Interim Income payable to the Minister of Fuel and Power.	
Interest	2,660,476
Interim Income	12,400,000
	<u>£23,255,586</u>

COAL BOARD

31st DECEMBER, 1947—(contd.)

ASSETS

	<i>Brought Forward</i>	£	£	\$
IV Current Assets				267,674,488
Stocks of Products and Stores (<i>Schedule III</i>) (valued as explained in para 7 of the Explanatory Notes on the Accounts) —				
Products		8,509,583		
Stores and Materials		39,558,373		
		<hr/>	48,067,956	
Debtors (<i>Schedule IV</i>)		67,094,220		
Bills Receivable (<i>Schedule IV</i>)		110,768		
Cash and Bank Balances —				
Cash in Hand		184,851		
Bank Balances		2,582,461		
		<hr/>	69,972,300	
			<hr/>	118,040,256

V Profit and Loss Account

Debit Balance brought forward 31st December, 1946	213,502	
Deficiency for the year ended 31st December, 1947	23,255,586	
	<hr/>	23,469,088
		<hr/>
		£409,183,827
		<hr/>

YEAR ENDED 31st DECEMBER, 1947

		£
Income from Investments		31,332
Other Income		124,845
Loss for Year, Carried Down		8,195,110
		<hr/>
		£8,351,287
		<hr/>

Deficiency carried to Balance Sheet	23,255,586
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£23,255,586

NATIONAL COAL BOARD

REPORT BY MESSRS. THOMSON McLINTOCK & CO.**Report to the National Coal Board by the Auditors appointed under Section 31(2) of the Coal Industry Nationalisation Act, 1946, by the Minister of Fuel and Power.**

We report that we have examined the books and accounts of the National Coal Board for the year ended 31st December, 1947, and the foregoing Balance Sheet and Profit and Loss Account which are in agreement therewith.

We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit. In our opinion, proper books of account have been kept by the Board so far as appears from our examination of those books, and proper returns adequate for the purposes of our audit have been received from branches not visited by us.

An extensive internal audit conforming to a programme approved by us has been carried out by the Internal Audit Staff of the Board, and by professional firms of accountants engaged by the Board for the purpose. In conducting the audit we have had regard to the extent of the internal audit performed.

No amounts can yet be placed on those fixed assets vesting in the Board under the Coal Industry Nationalisation Act, 1946, for which a valuation has to be determined by Valuation Boards appointed under the Act, nor can the corresponding liability to the Minister of Fuel and Power which thereby arises be ascertained.

The amounts payable to former owners for stocks of products and stores taken over at the vesting date (1st January, 1947) have also to be determined by the Valuation Boards, but the former owners submitted their valuations at the vesting date, and these have been adopted provisionally in the Board's books and accounts, subject only to adjustment in the case of known errors or corrections acceptable to the former owners. To the extent that stocks have been used or disposed of during the year, the Board's operating loss for 1947 is overstated by the amount of any reduction which may be made by the Valuation Boards in the amounts claimed by the former owners. Vesting date stocks remaining at 31st December, 1947, have been valued at the same prices as were claimed by the former owners at the vesting date, without reference to the actual value at the date of the Balance Sheet, and any adjustment by the Valuation Boards of the vesting date valuation would lead to a corresponding adjustment of the value at 31st December, 1947, subject to adjustments arising from changes in market prices between the two dates, and from any depreciation or obsolescence arising in 1947.

The amounts receivable from the former owners in payment of certain liabilities which the Board assumed at the vesting date have not yet been agreed. An amount of £1,917,779 is shown in a suspense account at 31st December, 1947, for accrued 1947 holiday pay which is claimed by the Board from the former owners but for which they do not admit liability.

We have not seen Deeds of Title to the properties vesting in the Board under the Act

Subject to these remarks, in our opinion and to the best of our information and according to the explanation given to us, the Balance Sheet gives a true and fair view of the state of the Board's affairs as at 31st December, 1947, and the Profit and Loss Account gives a true and fair view of the operations for the year ended on that date

THOMSON McLINTOCK & CO

Chartered Accountants.

London,

28th June, 1948

NATIONAL COAL BOARD

ACCOUNTS FOR THE YEAR ENDED 31st DECEMBER, 1947

FIXED ASSETS—SUMMARY

1. Balance as at 31st December, 1946	£	
Purchases at Cost	82,462	
Less Provision for Depreciation	1,234	
	<hr/>	81,228
2. Fixed Assets vested in the Board on 1st January, 1947, or subsequently in accordance with the Coal Industry Nationalisation Act.		
(a) Assets for which compensation has been determined—		
(i) Collieries		
Valued at global sum determined in accordance with Section 10 of the Coal Industry Nationalisation Act, and to be charged to the Board in accordance with Section 28 of the Act	164,660,000	
1 The compensation has not yet been allocated between districts or undertakings and it is not yet possible to analyse the compensation between types of assets		
2 The cost of the assets to the Board may differ from the amount shown, in the event of the issue of Stock at a premium or discount in satisfaction of compensation		
(ii) Minerals and other Fixed Assets of the Coal Commission		
Valued at cost, representing the amount charged to the Board by the Minister of Fuel and Power as the value of Treasury Stock issued in exchange for Coal Commission Stock		
	£	
Minerals	78,442,369	
Freehold Properties	8,000	
Office Equipment	6,720	
	<hr/>	78,457,089
(iii) Capital Outlay Refunds		
Amount of refunds made by the Minister of Fuel and Power up to 31st December, 1947 (including interest for periods up to 31st December, 1946), and charged to the Board in accordance with Section 28 of the Coal Industry Nationalisation Act	17,172,323	
	<hr/>	260,289,412
(b) Assets for which compensation has not been determined		
(i) Ancillaries	—	
(ii) Interests under a former Freeholder's lease of minerals	—	
(iii) Compensation for Severance	—	
	<hr/>	—
3. Additions during year ended 31st December, 1947 (excluding Assets vesting in accordance with the Act), at cost. (Detailed analysis in Schedule I(b))		
		18,833,976
Carried Forward		<hr/> 279,204,616

	<i>Brought Forward</i>	£ 279,204,616
4. Less : Disposals. (<i>Detailed analysis in Schedule I (b)</i>)	479,594	
5. Provision for Depreciation for the year ended 31st December, 1947, of all Fixed Assets, including those for which the compensation payable has not yet been determined. (<i>Detailed analysis in Schedule I(c)</i>)	15,232,184	15,711,688
6. BALANCE AS AT 31st DECEMBER, 1947		<u>£263,492,928</u>

ANALYSIS OF BALANCE AS AT 31st DECEMBER, 1947

7. Fixed Assets at Cost	£ 278,726,346
8. Less Provision for Depreciation	15,233,418
9. BALANCE	<u>£263,492,928</u>

ACCOUNTS FOR THE YEAR

FIXED ASSETS—

1. Analysis by Activities—

(a) Additions for Year —

	£	£	£
Collieries	14,563,485	—	1,076,135
Coal Selling Depots	54,455	—	—
Coke Ovens	398,088	—	—
Secondary By-Product Plants	3,663	—	—
Briquetting Plants	92,864	—	—
Brickworks and Tileworks	22,140	—	—
Railway Wagons	74,000	—	—
Wagon Repair Shops	292	—	—
Houses	2,183,060	—	—
Estates and Farms	63,386	—	—
General Offices	704,403	24,724	—
Other Activities	669,140	1,925	—

Total	18,833,976	26,649	1,076,135
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(b) Disposals for Year —

Collieries	108,511	—	—
Coal Selling Depots	5,825	—	—
Coke Ovens	3,959	—	—
Secondary By-Product Plants	510	—	—
Railway Wagons	175,602	—	—
Houses	4,887	—	—
Estates and Farms	5,829	—	—
General Offices	5,956	152	—
Other Activities	168,425	—	161,217

Total	479,504	152	161,217
-------	---------	-----	---------

(c) Additions less Disposals —

Collieries	14,454,974	—	1,076,135
Coal Selling Depots	48,630	—	—
Coke Ovens	394,129	—	—
Secondary By-Product Plants	3,153	—	—
Briquetting Plants	92,864	—	—
Brickworks and Tileworks	22,140	—	—
Railway Wagons	101,602	—	—
Wagon Repair Shops	292	—	—
Houses	2,183,173	—	—
Estates and Farms	57,557	—	—
General Offices	698,447	24,572	—
Other Activities	500,715	1,925	161,217

Total	£18,354,472	26,497	914,918
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2. Analysis by Types of Assets—

Additions less Disposals

Land	24,862	—	—
Buildings	763,711	1,924	—
Houses	2,204,443	—	—
Mines (including Surface Works)	2,526,252	—	—
Surface Works (other than Mines)	97,537	—	—
Plant and Machinery	12,414,056	30	1,076,135
Road Vehicles	346,995	4,269	—
Minerals	161,227	—	161,217
Office Furniture and Machinery	176,011	20,274	—
Railway Wagons	43,481	—	—
Other Assets	5,313	—	—

Total	18,354,472	26,497	914,918
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ADDITIONS AND DISPOSALS

DIVISIONS

Scottish	Northern	North-Eastern	North-Western	East Midlands	West Midlands	South-Western	South-Eastern
£ 1,757,249 799 1,467 — 726 1,454 2,049 99 93,720 1,982 95,282 106,302	£ 2,725,090 667 221,927 560 779 3,975 2,838 193 28,760 7,886 67,759 108,726	£ 2,351,072 1,889 8,461 1,589 22,126 1,710 48,787 — 1,282,872 1,149 112,193 78,063	£ 939,238 28,614 3,645 26 — 158 — — 48,332 10,240 16,148 137,867	£ 2,684,876 16,987 12,975 — 5,314 773 9,938 — 564,921 25,266 184,694 173,221	£ 1,366,296 — — — 3,407 14,070 — — 37,791 16,141 144,644 25,628	£ 1,511,874 5,499 149,613 1,488 60,512 — 10,388 — 128,752 722 51,419 36,604	£ 151,655 — — — — — — — 2,912 — 7,540 804
2,061,129	3,169,160	3,909,911	1,184,268	3,678,965	1,607,977	1,956,871	162,911
24,200 5 1,079 — 25,850 — 782 3,017 —	6,209 568 1,397 — 47 145 2,296 386 975	17,549 1,253 — — 39,929 1,400 1,265 — 903	8,230 3,782 — 510 19,846 5 710 753 2,993	15,311 180 — — 21,933 1,904 724 773 1,452	6,717 — — — 22,883 1,433 52 641 10	30,007 37 1,483 — 45,114 — — 234 875	288 — — — — — — — —
54,933	12,023	62,299	36,829	42,277	31,736	77,750	288
1,733,049 794 388 — 726 1,454 23,801 99 93,720 1,200 92,265 106,302	2,718,881 99 220,530 560 779 3,975 2,791 193 28,615 5,590 67,873 107,751	2,333,523 636 8,461 1,589 22,126 1,710 8,858 — 1,281,472 116 112,193 77,160	931,008 24,832 3,645 484 — 158 19,846 — 48,327 9,530 15,395 134,874	2,669,565 16,807 12,975 — 5,314 773 11,995 — 563,017 24,542 183,921 171,769	1,359,579 — — — 3,407 14,070 22,883 — 36,358 16,089 144,003 25,618	1,481,867 5,462 148,130 1,488 60,512 — 34,726 — 128,752 722 51,185 35,729	151,367 — — — — — — — 2,912 — 7,540 804
2,006,196	3,157,137	3,847,612	1,147,439	3,636,688	1,576,241	1,879,121	162,623
602 78,860 96,490 594,092 5,678 1,207,212 24,209 — 18,721 18,481 —	1,795 102,357 34,341 315,228 5,996 2,616,871 48,857 — 23,938 7,754 —	12,702 130,721 1,280,787 272,992 736 2,049,665 53,932 — 22,003 30,933 163	20 79,721 55,902 159,019 — 798,787 64,460 — 5,860 17,120 800	12,318 163,919 567,468 591,131 21,863 2,162,171 69,338 10 50,249 7,613 1,340	1,433 131,046 37,791 181,938 912 1,187,194 39,932 — 17,299 18,383 30	62 66,156 128,752 393,787 62,352 1,190,597 39,051 — 15,883 20,571 3,040	— 9,007 2,912 18,065 — 125,394 2,947 — 1,784 — —
2,006,179 17	3,157,137 —	3,854,634 7,022	1,147,449 10	3,632,174 4,514	1,576,266 25	1,879,109 12	160,109 2,514
2,006,196	3,157,137	3,847,612	1,147,439	3,636,688	1,576,241	1,879,121	162,622

activity, unless they form part of an activity such as a Selling Depot For this reason, the figures for type of asset, where all Houses are included Similar differences occur in the case of Railway Wagons

NATIONAL COAL BOARD
ACCOUNTS FOR THE YEAR ENDED 31st DECEMBER, 1947
FIXED ASSETS—DEPRECIATION PROVISION FOR THE YEAR

	TOTAL	Head- quarters	DIVISIONS							
			Scottish	Northern	North Eastern	North Western	East Midlands	West Midlands	South Western	South Eastern
£	£	£	£	£	£	£	£	£	£	£
1. Collieries ..	12,514,473	—	1,348,028	2,429,254	2,749,041	871,885	2,215,741	1,042,244	1,761,658	96,622
2. Coal Selling Depots ..	48,574	—	3,947	6,170	4,531	18,892	4,838	1,988	8,208	—
3. Coke Ovens . .	682,575	—	13,716	315,479	213,277	22,348	99,845	—	17,910	—
4. Secondary By-Product Plants	78,136	—	2,633	25,229	20,303	288	4,301	—	25,382	—
5. Manufactured Fuel Plants	13,494	—	—	—	—	—	—	—	13,494	—
6. Briquetting Plants	93,221	—	23,877	9,000	7,520	—	3,957	8,553	39,542	772
7. Brickworks and Tile- works	77,760	—	34,491	14,494	4,359	1,640	11,085	9,494	2,197	—
8. Railway Wagons .	545,538	—	31,037	2,229	210,705	29,716	100,578	44,468	126,805	—
9. Wagon Repair Shops ..	44,056	—	11,489	—	8,318	—	1,410	6,000	16,839	—
10. Houses . .	646,073	190	60,275	200,233	156,062	29,317	109,680	30,138	57,975	2,203
11. Estates and Farms .	44,758	—	11,439	16,430	2,176	1,838	6,232	4,763	1,480	400
12. Other Activities .	443,526	8,498	59,455	196,466	32,399	41,958	39,191	36,385	20,572	8,602
13. Total .	£15,232,184	8,688	1,600,387	3,214,984	3,408,691	1,017,882	2,596,858	1,184,033	2,092,062	108,599

Note — Until the amount of compensation payable for assets vesting in the Board is determined and allocated, it is not possible to calculate the appropriate provision for Depreciation of each type of asset. The figures shown above represent provisional charges based on the best available information as to the possible amounts of the compensation payable and the effective working lives of the assets.

NATIONAL COAL BOARD
ACCOUNTS FOR THE YEAR ENDED 31st DECEMBER, 1947

INVESTMENTS

	Nominal Amount	Book Value	Market Value 31st December, 1947	
			Price	Amount
1. Government Securities—	£	£		£
(a) 2½% National War Bonds 1954–56	2,066,905	2,066,354	100¼	2,082,407
(b) 2½% Savings Bonds 1964–67	125,000	124,922	95	118,750
(c) 2½% Defence Bonds	500	500	Par	500
(d) 3% Defence Bonds	2,000	2,000	Par	2,000
	2,194,405	2,193,776		2,203,657
2. British Coal Utilisation Research Association.				
3½% First Debenture secured on Freehold Property already erected or to be erected, and repayable on six months' notice	60,000	60,000	not quoted	—
4½% Second Debenture secured on the Assets of the Subsidiary Company, Cura Patents Ltd, and all other Assets of the Association, and repayable on six months' notice	10,000	10,000	not quoted	—
3. Total	£2,264,405	£2,263,776		£2,203,657

Note —With the exception of £6,822 2½% National War Bonds, 1954–56, the Government Securities represented investments of the Board's Reserve Fund (*see* Schedule VIII)

NATIONAL COAL BOARD
ACCOUNTS FOR THE YEAR ENDED 31st DECEMBER, 1947
DEBTORS AND BILLS RECEIVABLE

	TOTAL	Head- quarters	DIVISIONS							
			Scottish	Northern	North Eastern	North Western	East Midlands	West Midlands	South Western	South Eastern
	£	£	£	£	£	£	£	£	£	£
Debtors										
1 Trade Debtors	51,785,594	77,167	7,159,961	7,855,231	10,602,859	4,320,423	10,257,067	5,054,113	6,061,802	396,971
2 Colliery Concerns and Associations	1,368,249	—	102,606	454,809	145,226	55,952	182,622	47,142	359,792	10,100
3 Colliery Concerns and Others— Amounts owing in respect of Workmen's Compensation Li- abilities transferred to the Board	12,448,128	12,448,128	—	—	—	—	—	—	—	—
4 Payments in Advance	783,331	4,242	134,435	162,493	142,771	53,556	103,607	48,791	77,992	5,444
5 Income Tax Recoverable	147,480	53,967	23,775	44,600	4,146	5,655	17,809	2,415	2,897	1,990
6 Deposits	51,016	70	4,153	34,019	1,345	6,834	647	656	3,172	120
7 Secured Loans to Officials and Staff (in respect of Purchases of Houses and Motor Cars)	31,404	9,106	193	2,599	1,147	2,866	7,172	5,941	2,580	—
8 Other Debtors	718,909	39,756	256,333	48,340	35,695	25,545	199,914	23,504	80,115	9,707
9 Less— Provision for Bad and Doubt- ful Debts and for Discounts and Allowances	67,274,111	12,632,436	7,681,456	8,602,091	10,933,189	4,470,631	10,768,838	5,182,562	6,582,556	420,352
	179,891	5,907	23,852	26,430	35,659	12,901	34,360	13,806	22,351	4,625
10. Total	£67,094,220	12,628,529	7,657,604	8,575,661	10,897,530	4,457,730	10,734,478	5,168,756	6,560,205	415,727
Bills receivable	£110,768	—	—	68,907	33,428	—	3,917	—	4,516	—

NATIONAL COAL BOARD

ACCOUNTS FOR THE YEAR ENDED 31st DECEMBER, 1947

CAPITAL LIABILITIES

(LIABILITIES TO THE MINISTER OF FUEL AND POWER IN ACCORDANCE WITH SECTIONS 26 AND 28 OF THE COAL INDUSTRY NATIONALISATION ACT)

Total Amount	Capital Repayments during 1947	Balance 31st December 1947	Repayment by Termable Annuity		
			Ref No	Term	Interest Rate Annual Payment
£	£	£			£
78,457,089	804,819	77,652,270	2	50 years to 31st Dec, 1996	2½% p a 2,766,245
10,112,608	103,730	10,008,278	1	50 years to 31st Dec, 1996	2½% p a 356,530
99,010	99,010	Nil			
7,022,936	—	7,022,936	—	50 years to 31st Dec, 1997	2½% p a —
—	—	—			
17,233,954	202,740	17,031,214			
164,660,000	—	164,660,000			

1. Liabilities in respect of Assets vested in the Board on 1st January, 1947, or subsequently in accordance with the Act.

(a) Amount charged to the Board in respect of 2½% Treasury Stock (1986-2016) issued in replacement of Coal Commission Stock

(b) Capital Outlay Refunds Amount of refunds made by the Minister of Fuel and Power up to 31st December, 1947 —
(i) To 31st December, 1946

(ii) Interest to 31st December, 1946 on payments made up to that date

(iii) Year ended 31st December, 1947

(iv) After 31st December, 1947 Amounts not yet known

(c) Suspense Account in respect of amounts of Compensation Payable which have not yet been charged to the Board —

(i) Collieries. Amount of the global sum determined in accordance with Section 10 of the Act. The amount charged to the Board may differ from the amount shown in the event of the issue of stock at a premium or discount in satisfaction of compensation

- (ii) Ancillaries Amount not yet known .
 (iii) Stocks of Products and Stores Provisional amount based on the Inventories rendered by Colliery Concerns and others
 (iv) Interests under a former Freeholder's Lease of Minerals Amount not yet known
 (v) Compensation for Severance Amount not yet known
 (vi) Expenses of the Crown in respect of Stock and Debt Amount not yet known

2. Advances by the Minister of Fuel and Power

- Advances in respect of expenditure chargeable to capital account, including the provision of working capital (Maximum borrowings during the five years, ending 11th July, 1951—£150,000,000)
 (a) Borrowed and repaid during 1947
 (b) Outstanding on 31st December, 1947 —
 (i) Funded for repayment
 (ii) Temporary advances carried forward

3. Total (Subject to the addition of amounts not yet known)

39,383,189	—	—	39,383,189
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
204,043,189	—	—	204,043,189
8,000,000	8,000,000	—	—
20,000,000	—	—	20,000,000
13,085,000	—	—	13,085,000
41,085,000	8,000,000	—	33,085,000
£340,819,232	£9,007,559	—	£331,811,673

NATIONAL COAL BOARD
ACCOUNTS FOR THE YEAR ENDED 31st DECEMBER, 1947
PROVISIONS FOR DEFERRED LIABILITIES

	TOTAL	Head- quarters and National Items	DIVISIONS							
			Scottish	Northern	North Eastern	North Western	East Midlands	West Midlands	South Western	South Eastern
	£	£	£	£	£	£	£	£	£	
1. Workmen's Compensation—										
(a) Pre-Vesting Date Cases	17,528,333	21,331,142	287,998	462,096	377,215	465,864	494,056	255,329	1,449,852	10,409
(b) 1947 Cases	6,795,386	—	625,205	906,791	883,878	866,586	1,320,854	646,646	1,406,025	139,401
2. Surface Damage	220,811	1,375	30,615	21,412	27,473	20,365	70,007	34,655	14,336	573
3. Compensation for Loss of Office	296,545	296,545	—	—	—	—	—	—	—	—
4. Rebuilding of Coke Ovens and Kilns	270,911	—	13,856	166,042	57,240	300	22,345	—	11,128	—
5. Insurance Fund	325,733	325,733	—	—	—	—	—	—	—	—
6. TOTAL	£25,437,719	21,954,795	381,678	632,149	591,376	421,397	919,150	425,972	18,363	129,565

1. Workmen's Compensation—

(a) Pre-Vesting Date Cases

(b) 1947 Cases

2. Surface Damage

3. Compensation for Loss of Office

4. Rebuilding of Coke Ovens and
Kilns

5. Insurance Fund

6. TOTAL

Notes —1. All the provisions except that for Workmen's Compensation (Pre-Vesting Date Cases) have been built up during the year 1947, by charges to Profit and Loss Account

2 The debit balances for Divisions (indicated by figures in italics) represent payments to Workmen during 1947, which are covered by the general provision at Headquarters. This provision cannot yet be allocated to Divisions

NATIONAL COAL BOARD

ACCOUNTS FOR THE YEAR ENDED 31st DECEMBER, 1947

CURRENT LIABILITIES

	TOTAL	Head- quarters and National Items	DIVISIONS								South Eastern
			Scottish	Northern	North Eastern	North Western	East Midlands	West Midlands	South Western		
£		£	£	£	£	£	£	£	£	£	
1. General Creditors for Supplies and Services	17,853,963	292,437	2,554,838	4,569,232	2,453,588	1,160,151	2,979,470	1,261,418	2,469,011	113,818	
2. Colliery Concerns and Associations	285,606	—	92,120	64,797	53,637	17,316	2,266	46,856	8,444	170	
3. Interim Income	12,400,000	12,400,000	—	—	—	—	—	—	—	—	
4. Accrued Charges—											
(a) Wages	6,961,842	—	387,146	1,313,710	1,671,875	507,869	1,149,730	652,407	1,214,624	64,481	
(b) Others	4,074,154	448,347	605,888	666,353	685,994	331,788	477,189	306,471	520,618	31,506	
5. Other Creditors	6,408,252	3,241,322	418,190	547,964	548,851	241,259	694,594	145,251	531,730	39,091	
6. Total	47,983,817	16,382,106	4,058,182	7,162,056	5,413,945	2,258,888	5,303,249	2,412,403	4,744,427	249,066	
7. Bank Overdrafts	837,362										
8. TOTAL	\$48,821,179										

NATIONAL COAL BOARD
ACCOUNTS FOR THE YEAR ENDED 31st DECEMBER, 1947

RESERVE FUND

In accordance with Section 29 of the Coal Industry Nationalisation Act and with the Coal Commission Dissolution Order (S R & O, No 396 of 1947) the Reserve Fund of the Coal Commission was made up to 29th March, 1947, and the balance of the Reserve Fund (£3,113,256) was transferred to the Board (See Schedule XIV)

The Reserve Fund of the Coal Commission was held as follows —

	£
Government Securities	2,186,954
Treasury Bills	244,703
Cash ..	681,599
	<hr/>
	£3,113,256
	<hr/>

As at 31st December, 1947, the Reserve Fund of £3,113,256 was held as follows —

	£
(a) Invested in Government Securities (<i>see</i> Schedule II)	2,186,954
(b) Invested in the Board's Assets	926,302
	<hr/>
	£3,113,256
	<hr/>

ACCOUNTS FOR THE YEAR ENDED 31st DECEMBER, 1947

SUMMARY OF OPERATING PROFITS AND LOSSES

	DIVISIONS								
	TOTAL	Scottish	Northern	North Eastern	North Western	East Midlands	West Midlands	South Western	South Eastern
	£	£	£	£	£	£	£	£	£
1. Collieries (<i>Schedule X</i>)	9,203,905	1,574,097	8,795,131	623,022	1,570,675	7,510,621	2,686,092	10,741,403	490,526
2. Coal Selling Depots	58,515	8,865	14,030	22,534	62,443	9,980	5,309	1,029	647
3. Coke Ovens (<i>Schedule XI</i>)	925,555	43,760	279,854	348,235	14,911	148,223		120,394	--
4. Secondary By-Product Plants	147,207	164	42,662	45,887	3,291	41,606		20,507	--
5. Manufactured Fuel Plants	57,996	—	—	—	—	—	—	57,996	—
6. Briquetting Plants	228,409	50,681	26,826	4,866	—	17,323	38,587	98,749	1,109
7. Brickworks and Tileworks	122,847	65,507	27,786	4,643	4,715	6,717	13,359	9,406	—
8. Railway Wagons	1,203,407	162,887	2,140	381,507	78,440	165,520	119,911	293,002	—
9. Wagon Repair Shops	111,491	24,920	—	12,482	2,703	3,515	25,944	41,927	—
10. Houses	202,653	94,508	13,602	15,332	31,090	39,481	8,116	50,265	8,127
11. Estates and Farms	90,545	17,443	64,638	9,531	10,401	10,187	665	14,988	2,128
12. Other Activities	218,604	41,775	116,605	38,453	1,636	28,112	384	2,564	5,797
13. Licensed Mines. Royalties Receivable less Payable	54,682	151,163	47,861	19,773	2,070	32,447	52,090	150,860	—
14. TOTAL.	6,187,300	2,046,426	8,254,849	1,443,117	1,461,699	7,894,436	2,984,225	10,287,096	501,860

Note.—Figures in italics denote losses.

NATIONAL
ACCOUNTS FOR THE YEAR
COLLIERY PROFIT AND

	TOTAL FOR GREAT BRITAIN		SCOTTISH			
			FIFE AND CLACKMANNAN AREA		LOTHIANS AREA	
	Amount £	Per Ton Saleable s. d.	Amount £	Per Ton Saleable s. d.	Amount £	Per Ton Saleable s. d.
SALEABLE TONNAGE .	184,748,211		6,468,821		3,283,051	
1. PITHEAD PROCEEDS	371,836,736	40/ 3 0	12,793,668	39/ 6 7	6,435,958	39/ 2 5
COSTS						
2. Wages (including allow- ances in kind)	236,237,805	25/ 6 9	6,487,401	20/ 0 7	3,608,001	21/11 7
3. Holiday Pay	8,201,353	10 7	241,251	9 0	132,124	9 7
4. Workmen's Compen- sation	9,658,426	1/ 0 5	242,535	9 0	133,566	9 8
5. National Insurance	4,696,533	6 1	142,850	5 3	78,782	5 8
6. Roof Supports	23,371,456	2/ 6 4	835,443	2/ 7 0	345,700	2/ 1 3
7. General Stores	24,744,772	2/ 8 1	785,272	2/ 5 1	403,200	2/ 5 5
8. Power, Heat and Light	27,381,874	2/11 6	974,973	3/ 0 2	612,481	3/ 8 8
9. Repairs and Renewals	6,441,078	8 4	154,218	5 7	85,117	6 2
10. Salaries	9,113,020	11 8	246,667	9 2	132,179	9 7
11. General Expenses	13,463,340	1/ 5 5	545,822	1/ 8 3	204,254	1/ 2 9
12. Administrative Expenses	5,196,677	6 7	192,106	7 1	116,609	8 5
13. Depreciation	12,534,807	1/ 4 3	434,653	1/ 4 1	172,777	1/ 0 6
14. Total Costs	381,040,641	41/ 3 0	11,283,191	34/10 7	6,024,790	36/ 8 5
15. PROFIT OR LOSS before charging Interest and Interim Income (Item 1 of Schedule IX)	£9,203,905	1/ 0 0	1,510,477	4/ 8 0	411,168	2/ 6 0

Note —Figures in italics denote losses.

COAL BOARD

ENDED 31st DECEMBER, 1947

LOSS ACCOUNTS FOR THE YEAR

DIVISION

CENTRAL EAST AREA		CENTRAL WEST AREA		AYR AND DUMFRIES AREA		TOTAL	
3,686,391		4,499,656		4,247,144		22,185,063	
Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d.	Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s. d.
7,295,992	39/ 7 0	9,399,496	41/ 9 3	8,663,131	40/ 9 5	44,588,245	40/ 2·4
4,401,336	23/10 6	6,186,498	27/ 6 0	4,847,932	22/ 9 9	25,531,168	23/ 0·2
155,249	10·1	227,218	1/ 0 1	171,592	9 7	927,434	10·0
167,827	10 9	233,617	1/ 0 5	181,313	10 2	958,858	10 4
88,753	5 8	128,586	6 9	100,223	5 7	539,194	5 8
502,220	2/ 8 7	664,727	2/11 5	791,032	3/ 8 7	3,139,122	2/10·0
467,050	2/ 6 4	693,194	3/ 1·0	372,596	1/ 9·1	2,721,312	2/ 5·4
619,573	3/ 4 3	833,269	3/ 8 4	705,401	3/ 3·9	3,745,697	3/ 4·5
210,764	1/ 1 7	145,283	7 7	139,813	7 9	735,195	8·0
113,470	7 4	208,643	11 1	147,320	8 3	848,279	9·2
303,625	1/ 7 8	404,892	1/ 9 6	284,794	1/ 4·1	1,743,387	1/ 6·9
175,346	11 4	163,574	8 7	128,171	7 2	775,806	8·4
206,557	1/ 1 5	281,509	1/ 3·0	253,200	1/ 2 3	1,348,696	1/ 2·6
7,411,770	40/ 2 6	10,171,010	45/ 2 5	8,123,387	38/ 3 0	43,014,148	38/ 9 4
115,778	7 6	771,514	3/ 5 2	539,744	2/ 6 5	£1,574,097	1/ 5·0

NATIONAL

ACCOUNTS FOR THE YEAR
COLLIERY PROFIT AND LOSS

NORTHERN				
NORTH EAST DURHAM AREA		MID-EAST DURHAM AREA		
SALEABLE TONNAGE		3,509,048		4,904,998
	Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d
1. PITHEAD PROCEEDS	7,250,105	41/ 3 9	9,800,641	39/11·5
COSTS				
2. Wages (including allowances in kind)	5,352,666	30/ 6 1	7,585,625	30/11·2
3. Holiday Pay	163,221	11·2	255,189	1/ 0 5
4. Workmen's Compensation	125,594	8 6	200,453	9 8
5. National Insurance	93,824	6 4	144,432	7 1
6. Roof Supports	462,166	2/ 7 6	607,665	2/ 5 7
7. General Stores	569,390	3/ 2 9	720,403	2/11·2
8. Power, Heat and Light	398,477	2/ 3 3	510,993	2/ 1 0
9. Repairs and Renewals	25,658	1 7	38,989	1·9
10. Salaries	172,997	11·8	225,429	11 0
11. General Expenses	253,824	1/ 5 4	376,882	1/ 6·4
12. Administrative Expenses	84,274	5 8	113,337	5 6
13. Depreciation	236,484	1/ 4 2	284,880	1/ 2·0
14. TOTAL COSTS	7,938,575	45/ 3 0	11,064,277	45/ 1 4
15. LOSS before charging Interest and Interim Income (<i>Item 1 of Schedule IX</i>)	688,470	3/11 1	1,263,636	5/ 1·9

Note — Figures in italics denote losses.

COAL BOARD

ENDED 31st DECEMBER, 1947**ACCOUNTS FOR THE YEAR****DIVISION**

SOUTH EAST DURHAM AREA		SOUTH WEST DURHAM AREA		MID-WEST DURHAM AREA	
3,478,885		3,639,653		3,157,533	
Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d
7,024,851	40/ 4·5	7,391,694	40/ 7 4	6,320,189	40/ 0 4
4,983,804	28/ 7 7	5,881,017	32/ 3 8	5,441,687	34/ 5 6
172,236	11 9	194,590	1/ 0 8	168,593	1/ 0 8
132,670	9 2	136,287	9 0	95,968	7 3
96,745	6 7	109,260	7 2	100,741	7·7
466,127	2/ 8 1	598,815	3/ 3 5	442,841	2/ 9·7
453,057	2/ 7 2	691,277	3/ 9 6	479,729	3/ 0·5
435,011	2/ 6 0	439,811	2/ 5 0	340,815	2/ 1·9
1,019	0 1	16,816	1·1	22,871	1 7
128,516	8 9	152,837	10 1	178,406	1/ 1·6
214,424	1/ 2 8	281,970	1/ 6 6	229,617	1/ 5·5
91,114	6 3	109,097	7 2	70,170	5·3
256,863	1/ 5 7	224,412	1/ 2·8	187,116	1/ 2·2
7,431,586	42/ 8 6	8,836,189	48/ 6·7	7,758,554	49/ 1 8
406,735	2/ 4 1	1,444,495	7 11 3	1,438,365	9/ 1·4

(continued overleaf)

NATIONAL

ACCOUNTS FOR THE YEAR
COLLIERY PROFIT AND LOSS

NORTHERN				
		NORTH-WEST DURHAM AREA		SOUTHERN NORTHUMBER- LAND AREA
SALEABLE TONNAGE		5,450,249		2,866,976
		Amount £	Per Ton Saleable s d.	Amount £ Per Ton Saleable s d.
1. PITHEAD PROCEEDS		11,167,625	40/11 8	5,716,718 39/10·6
COSTS				
2. Wages (including allowances in kind)		9,120,455	33/ 5·7	4,263,619 29/ 8 9
3. Holiday Pay .		290,236	1/ 0·8	135,313 11·3
4. Workmen's Compensation ..		170,984	7 5	99,599 8 3
5. National Insurance ..		175,187	7 7	78,525 6·6
6. Roof Supports		695,486	2/ 6 6	323,345 2/ 3·1
7. General Stores		672,647	2/ 5 6	466,652 3/ 3·1
8. Power, Heat and Light		510,222	1/10·5	206,420 1/ 5·3
9. Repairs and Renewals		130,080	5·7	13,388 1 1
10. Salaries		319,082	1/ 2·1	137,913 11 5
11. General Expenses		406,803	1/ 5·9	193,049 1/ 4·2
12. Administrative Expenses		136,977	6·0	85,116 7·1
13. Depreciation .		460,536	1/ 8 3	189,333 1/ 3 9
14. TOTAL COSTS		13,088,695	48/ 0 4	6,192,272 43/ 2 4
15. LOSS before charging Interest and Interim Income (Item 1 of Schedule IX)		1,921,070	7/ 0 6	475,554 3/ 3 8

Note.—Figures in italics denote losses

COAL BOARD

ENDED 31st DECEMBER, 1947

ACCOUNTS FOR THE YEAR

DIVISION—(contd.)

CENTRAL NORTHUMBER- LAND AREA		NORTHERN NORTHUMBER- LAND AREA		CUMBERLAND AREA		TOTAL	
4,372,787		3,436,803		1,082,540		85,899,472	
Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s. d.
8,521,269	38/11 7	6,758,712	39/ 4 0	2,531,614	46/ 9 3	72,483,418	40/ 4 6
5,972,857	27/ 3 8	4,814,551	28/ 0 2	1,856,740	34/ 3 6	55,273,021	30/ 9 5
196,359	10 8	153,287	10 7	63,763	1/ 2 1	1,792,787	1/ 0 0
142,618	7 8	139,555	9 8	66,281	1/ 2 7	1,310,009	8 8
107,292	5 9	89,844	6 3	36,377	8 1	1,032,227	6 9
487,814	2/ 2 8	457,314	2/ 7 9	129,744	2/ 4 8	4,671,317	2/ 7 2
696,183	3/ 2 2	614,992	3/ 7 0	221,960	4/ 1 2	5,586,290	3/ 1 4
247,416	1/ 1 6	307,790	1/ 9 5	240,345	4/ 5 3	3,637,300	2/ 0 3
16,409	0 9	53,298	3 7	86,033	1/ 7 1	404,561	2 7
189,995	10 4	163,565	11 4	71,239	1/ 3 8	1,739,979	11 6
249,963	1/ 1 7	181,664	1/ 0 7	94,535	1/ 8 9	2,482,731	1/ 4 6
95,872	5 3	75,294	5 3	54,874	1/ 0 2	916,125	6 1
247,739	1/ 1 6	220,437	1/ 3 4	124,402	2/ 3 6	2,432,202	1/ 4 3
8,650,517	39/ 6 8	7,271,591	42/ 3 9	3,046,293	56/ 3 4	81,278,549	45/ 3 4
129,248	7 1	512,879	2/11 9	514,679	9/ 6 1	£3,795,131	4/10 8

NATIONAL

ACCOUNTS FOR THE YEAR
COLLIERY PROFIT AND LOSS

NORTH EASTERN				
SALEABLE TONNAGE	WORKSOP AREA		DONCASTER AREA	
	5,488,865		7,488,358	
	Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d
1. PITHEAD PROCEEDS	10,543,994	38/ 5 0	14,569,873	38/11 0
COSTS				
2. Wages (including allowance in kind)	6,391,025	23/ 3 4	8,378,965	22/ 4 5
3. Holiday Pay	217,892	9 5	291,582	9 4
4. Workmen's Compensation	182,955	8 0	247,874	7 9
5. National Insurance	128,577	5 6	166,314	5 3
6. Roof Supports	482,130	1/ 9 1	585,984	1/ 6·8
7. General Stores	666,913	2/ 5 2	748,825	2/ 0 0
8. Power, Heat and Light	716,025	2/ 7·3	1,041,207	2/ 9·4
9. Repairs and Renewals	271,518	11 9	527,991	1/ 4 9
10. Salaries	277,763	1/ 0 1	289,775	9 3
11. General Expenses	422,481	1/ 6·5	457,017	1/ 2 7
12. Administrative Expenses	137,353	6·0	209,938	6 7
13. Depreciation	422,021	1/ 6 5	521,616	1/ 4·7
14. TOTAL COSTS	10,316,653	37/ 7 1	13,467,088	35/11 6
15. PROFIT OR LOSS before charging Interest and Interim Income (<i>Item 1 of Schedule IX</i>)	227,341	9 9	1,102,785	2·11 4

Note.—Figures in italics denote losses

COAL BOARD

ENDED 31st DECEMBER, 1947**ACCOUNTS FOR THE YEAR****DIVISION**

ROTHERHAM AREA		CARLTON AREA		SOUTH BARNSELY AREA	
5,704,415		4,728,502		3,192,573	
Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d
10,938,381	38/ 4 2	9,314,076	39/ 4 7	6,119,992	38/ 4 1
6,795,527	23/ 9 9	6,146,711	26/ 0 0	3,977,114	24/11 0
259,624	10·9	235,049	11 9	131,368	9·9
190,147	8·0	157,616	8 0	106,532	8·0
138,043	5·8	125,589	6·4	75,228	5 6
517,602	1/ 9 8	592,862	2/ 6 1	365,856	2/ 3 5
840,564	2/11·4	764,960	3/ 2 8	394,458	2/ 5·7
910,319	3/ 2 3	839,735	3/ 6 6	402,073	2/ 6·2
155,010	6·5	166,928	8 5	200,366	1/ 3 1
301,532	1/ 0 7	254,206	1/ 0 9	166,181	1/ 0·5
409,081	1/ 5 2	298,829	1/ 3 1	220,919	1/ 4·6
139,641	5·9	121,612	6 2	70,282	5 3
443,841	1/ 6 7	283,125	1/ 2 4	226,360	1/ 5·0
11,100 931	38/11 1	9,987,222	42/ 2 9	6,336,737	39/ 8·4
162,550	6 9	673,146	2/10 2	216,745	1/ 4·3

(continued overleaf)

NATIONAL
ACCOUNTS FOR THE YEAR
COLLIERY PROFIT AND LOSS

SALEABLE TONNAGE

NORTH	
NORTH BARNSELEY AREA	
3,323,028	
Amount	Per Ton Saleable
<i>£</i>	<i>s</i> <i>d</i>
6,483,827	39/ 0 3
1. PITHEAD PROCEEDS	
COSTS	
2. Wages (including allowances in kind)	3,910,159 23 6 4
3. Holiday Pay	129,607 9 4
4. Workmen's Compensation	110,694 8 0
5. National Insurance	74,570 5 4
6. Roof Supports	457,160 2/ 9 0
7. General Stores	565,744 3/ 4 9
8. Power, Heat and Light	269,661 1/ 7 5
9. Repairs and Renewals	123,878 8 9
10. Salaries	164,281 11 9
11. General Expenses	187,548 1/ 1 5
12. Administrative Expenses	82,118 5 9
13. Depreciation	221,169 1/ 4 0
14. TOTAL COSTS	6,296,589 37/10 8
15. PROFIT OR LOSS before charging Interest and Interim Income (<i>Item 1 of Schedule IX</i>)	187,238 1/ 1 5

Note — Figures in italics denote losses

COAL BOARD

ENDED 31st DECEMBER, 1947**ACCOUNTS FOR THE YEAR****EASTERN DIVISION—(contd.)**

WAKEFIELD AREA		CASTLEFORD AREA		TOTAL	
2,835,866		5,548,683		38,310,290	
Amount	Per Ton Saleable	Amount	Per Ton Saleable	Amount	Per Ton Saleable
£	s d	£	s d	£	s. d.
5,694,576	40/ 1·9	10,959,052	39/ 6 0	74,623,771	38/11 5
3,695,168	26/ 0 7	6,412,306	23/ 1 4	45,706,975	23/10 3
130,535	11 0	221,871	9 6	1,617,528	10·1
94,529	8 0	184,954	8 0	1,275,301	8 0
79,003	6 7	132,814	5 8	920,138	5·8
280,902	1/11 8	610,651	2/ 2 4	3,893,147	2/ 0·4
287,185	2/ 0·3	483,764	1/ 8 9	4,752,413	2/ 5·8
502,066	3/ 6 5	907,882	3/ 3 3	5,588,968	2/11·0
224,338	1/ 7·0	413,582	1/ 5 9	2,083,611	1/ 1·1
169,582	1/ 2 4	303,742	1/ 1 1	1,927,062	1/ 0 1
184,508	1/ 3·6	366,236	1/ 3 8	2,546,619	1/ 3·9
68,867	5 8	108,294	4 7	938,105	5 9
202,270	1/ 5 1	430,480	1/ 6 6	2,750,882	1/ 5 2
5,918,953	41/ 8 9	10,576,576	38/ 1·5	74,000,749	38/ 7 6
224,377	1/ 7 0	382,476	1/ 4 5	4623,022	3·9

NATIONAL

ACCOUNTS FOR THE YEAR
COLLIERY PROFIT AND LOSS

SALEABLE TONNAGE

1. PITHEAD PROCEEDS

COSTS

2. Wages (including allowances in kind)

3. Holiday Pay

4. Workmen's Compensation

5. National Insurance

6. Roof Supports

7. General Stores

8. Power, Heat and Light

9. Repairs and Renewals

10. Salaries

11. General Expenses

12. Administrative Expenses

13. Depreciation

14. TOTAL COSTS

**15. LOSS before charging Interest and Interim
Income** (*Item 1 of Schedule IX*)

NORTH			
MANCHESTER AREA		WIGAN AREA	
5,371,178		2,543,227	
Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d
12,099,752	45/ 0 6	5,647,947	44/ 5 0
7,006,338	26/ 1 1	3,522,817	27/ 8 4
259,950	11 6	136,298	1/ 0 9
457,322	1/ 8 4	217,214	1/ 8 5
146,428	6 5	77,963	7 4
838,826	3/ 1 5	366,861	2/10 6
1,029,320	3/10 0	239,829	1/10 6
1,203,536	4/ 5 8	582,134	4/ 6 9
364,760	1/ 4 3	276,074	2/ 2 1
293,121	1/ 1 1	159,145	1/ 3 0
541,974	2/ 0 2	164,257	1/ 3 5
189,054	8 4	56,146	5 3
337,395	1/ 3 1	157,322	1/ 2 9
12,668,024	47/ 2 0	5,956,060	46/10 1
568,272	2/ 1 4	308,113	2/ 5 1

Note — Figures in italics denote losses

COAL BOARD

ENDED 31st DECEMBER, 1947

ACCOUNTS FOR THE YEAR

WESTERN DIVISION

ST HELENS AREA		BURNLEY AREA		NORTH WALES AREA		TOTAL	
2,434,133		846,026		2,038,446		13,233,010	
Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s. d.
5,560,926	45/ 8 3	1,873,221	44/ 3 4	4,235,704	41/ 6 7	29,417,550	44/ 5·5
3,411,971	28/ 0 4	1,153,600	27/ 3 3	2,756,182	27/ 0 5	17,850,908	26/11·8
137,306	1/ 1 5	50,523	1/ 2 3	100,927	11 9	685,004	1/ 0·4
206,507	1/ 8 4	71,385	1/ 8 2	140,144	1/ 4 5	1,092,572	1/ 7 8
76,345	7 5	28,411	8 0	60,306	7 1	389,453	7 1
323,965	2/ 8 0	98,169	2/ 3·8	261,532	2/ 6 8	1,889,353	2/10 3
386,767	3/ 2·1	76,685	1/ 9·8	302,752	2/11 7	2,035,353	3/ 0 9
655,798	5/ 4 7	238,287	5/ 7 6	418,158	4/ 1 2	3,097,913	4/ 8·2
53,037	5 2	56,344	1/ 4 0	29,776	3 5	779,991	1/ 2·1
136,225	1/ 1 4	74,617	1/ 9 2	97,709	11 6	760,817	1/ 1·8
177,727	1/ 5 5	78,239	1/10·2	129,387	1/ 3 2	1,091,584	1/ 7 8
82,676	8 2	20,546	5 8	94,462	11 1	442,884	8 0
184,805	1/ 6 2	57,336	1/ 4 3	135,535	1/ 3 9	872,393	1/ 3 8
5,833,129	47/11·1	2,004,142	47/ 4·5	4,526,870	44/ 5 0	30,983,225	46/10 0
272,203	2/ 2 8	130,921	3/ 1 1	291,166	2/10 3	£1,570,675	2/ 4 5

NATIONAL

ACCOUNTS FOR THE YEAR
COLLIERY PROFIT AND LOSS

		EAST MID			
		CHESTERFIELD AREA		MANSFIELD AREA	
SALEABLE TONNAGE		4,930,829		5,118,694	
		Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d
1. PITHEAD PROCEEDS		9,203,072	37/ 3 9	9,600,685	37/ 6 1
COSTS					
2. Wages (including allowances in kind)		5,112,509	20/ 8 8	5,288,348	20/8 0
3. Holiday Pay		161,261	7 8	166,219	7 8
4. Workmen's Compensation		255,237	1/ 0 4	265,575	1/ 0 5
5. National Insurance		95,769	4 7	96,168	4·5
6. Roof Supports		418,211	1/ 8 4	481,915	1/10 6
7. General Stores		881,188	3/ 6 9	717,825	2/ 9·7
8. Power, Heat and Light		563,278	2/ 3 4	564,980	2/ 2·5
9. Repairs and Renewals		68,475	3 3	147,267	6 9
10. Salaries		243,978	11 9	212,021	9 9
11. General Expenses		326,440	1/ 3 9	306,874	1/ 2 4
12. Administrative Expenses		67,533	3·3	112,057	5·2
13. Depreciation		369,926	1/ 6 0	334,046	1/ 3·6
14. TOTAL COSTS		8,563,805	34/ 8 8	8,693,295	33/11 6
15. PROFIT before charging Interest and Interim Income (Item 1 of Schedule IX)		639,267	2/ 7 1	907,390	3/ 6 5

COAL BOARD

ENDED 31st DECEMBER, 1947

ACCOUNTS FOR THE YEAR

LANDS DIVISION

EDWINSTOWE AREA		ALFRETON AREA		ILKESTON AREA	
5,879,822		4,473,345		4,946,561	
Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d
10,776,216	36/ 7·8	8,353,297	37/ 4·2	9,347,854	37/ 9 5
5,653,116	19/ 2·8	4,894,806	21/10 6	4,934,896	19/11·4
160,860	6·6	159,092	8 5	147,585	7·2
286,349	11·7	245,173	1/ 1 2	256,645	1/ 0 4
93,580	3·8	93,021	5·0	91,911	4·5
438,790	1/ 5·9	312,507	1/ 4·8	393,950	1/ 7·1
728,125	2/ 5 7	694,696	3/ 1 3	782,241	3/ 1·9
572,314	1/11·4	689,433	3/ 1 0	492,228	1/11 9
54,164	2·2	70,367	3·8	102,197	5·0
209,048	8·5	194,750	10·4	229,634	11·1
333,655	1/ 1·6	247,472	1/ 1 3	341,532	1/ 4·6
101,236	4 1	49,313	2 6	86,275	4·2
362,370	1/ 2 8	279,636	1/ 3 0	342,177	1/ 4 6
8,993,607	30/ 7 1	7,930,266	35/ 5 5	8,201,271	33/ 1·9
1,782,609	6/ 0 7	423,031	1/10 7	1,146,583	4/ 7·6

(continued overleaf)

NATIONAL

ACCOUNTS FOR THE YEAR
COLLIERY PROFIT AND LOSS

SALEABLE TONNAGE

1. PITHEAD PROCEEDS

COSTS

2. Wages (including allowances in kind)

3. Holiday Pay

4. Workmen's Compensation .

5. National Insurance

6. Roof Supports .

7. General Stores

8. Power, Heat and Light . .

9. Repairs and Renewals .

10. Salaries

11. General Expenses

12. Administrative Expenses .

13. Depreciation

14. TOTAL COSTS

15. PROFIT before charging Interest and Interim Income
(Item 1 of Schedule IX) . . .

EAST MIDLANDS	
NOTTINGHAM AREA	
3,333,337	
Amount £	Per Ton Saleable s d
6,404,983	38/ 5 2
3,663,144	21/11 7
116,949	8·4
194,903	1/ 2 0
67,757	4 9
247,812	1/ 5 8
452,143	2/ 8 6
291,303	1/ 9 0
88,475	6 4
161,448	11 6
245,549	1/ 5 7
81,594	5 9
221,630	1/ 4 0
5,832,707	35/ 0 0
572,276	3/ 5 2

COAL BOARD

ENDED 31st DECEMBER, 1947**ACCOUNTS FOR THE YEAR****DIVISION—(contd.)**

SOUTH DERBYSHIRE AREA		LEICESTERSHIRE AREA		TOTAL	
2,679,842		3,321,553		34,683,983	
Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d.
5,047,118	37/ 8 0	6,068,434	36/ 6 5	64,801,659	37/ 4 4
2,646,141	19/ 9 0	3,021,396	18 2 3	35,214,356	20/ 3·7
84,119	7 6	89,954	6 5	1,086,039	7 5
135,528	1/ 0 1	151,974	11 0	1,791,384	1/ 0 4
44,828	4 0	53,159	3 9	636,193	4·4
266,248	1/11 9	280,497	1 8 3	2,839,930	1/ 7 6
276,995	2/ 0 8	310,475	1/10 4	4,843,688	2/ 9 5
199,119	1/ 5 8	240,514	1/ 5 4	3,613,169	2/ 1 0
178,214	1/ 4 0	21,192	1 5	730,351	5 1
118,460	10 6	102,485	7 4	1,471,824	10 2
155,463	1/ 1 9	228,201	1 4 5	2,185,186	1/ 3·1
67,225	6 0	83,840	6 1	649,073	4·5
140,991	1/ 0 6	179,069	1 0 9	2,229,845	1/ 3 4
4,313,331	32/ 2 3	4,762,756	28, 8 2	57,291,038	33/ 0 4
733,787	5/ 5 7	1,305,678	7/10 3	£7,510,621	4/ 4·0

NATIONAL

ACCOUNTS FOR THE YEAR
COLLIERY PROFIT AND LOSS

WEST MIDLANDS

SALEABLE TONNAGE

1. PITHEAD PROCEEDS

COSTS

2. Wages (including allowances
in kind)

3. Holiday Pay

4. Workmen's Compensation

5. National Insurance

6. Roof Supports

7. General Stores

8. Power, Heat and Light

9. Repairs and Renewals

10. Salaries

11. General Expenses

12. Administrative Expenses

13. Depreciation

14. TOTAL COSTS

15. PROFIT before charging
Interest and Interim
Income (*Item I of Schedule*
IX) ..

NORTH STAFFS. AREA		CANNOCK CHASE AREA	
6,210,847		4,317,903	
Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d
12,893,022	41/ 6 2	8,804,409	40/ 9 4
6,423,556	20/ 8 2	5,448,579	25/ 2 8
239,228	9 2	199,765	11 1
477,485	1/ 6 5	211,296	11·7
138,039	5 3	121,731	6 8
731,797	2/ 4·3	657,039	3/ 0 5
730,064	2/ 4 2	299,569	1/ 4·7
1,127,420	3, 7 6	606,494	2/ 9·7
378,260	1/ 2 6	299,198	1/ 4 6
264,593	10 3	224,460	1/ 0 5
580,953	1/10 5	287,172	1/ 4 0
217,680	8 4	88,221	4 9
402,238	1/ 3 5	265,822	1/ 2 8
11,711,313	37/ 8 6	8,709,346	40/ 4 1
1,181,709	3/ 9 6	95,063	5 3

COAL BOARD

ENDED 31st DECEMBER, 1947

ACCOUNTS FOR THE YEAR

DIVISION

SOUTH STAFFS. AND SHROPSHIRE AREA		WARWICKSHIRE AREA		TOTAL	
1,314,075		4,799,345		16,642,170	
Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d.
2,685,435	40/10 5	9,741,501	40 7 1	34,124,367	41/ 0 1
1,562,467	23/ 9 4	5,299,577	22 1 0	18,734,179	22/ 6 2
58,233	10 6	172,032	8 6	669,258	9 7
54,161	9 9	194,319	9 7	937,261	1/ 1 5
34,316	6 3	101,597	5 1	395,633	5 7
245,086	3/ 8 8	583,067	2/ 5 2	2,216,989	2/ 8 0
131,612	2/ 0 0	291,072	1/ 2·6	1,452,317	1/ 8·9
156,596	2/ 4 6	513,078	2/ 1 6	2,403,588	2/10 7
73,750	1/ 1 5	299,158	1/ 3 0	1,050,366	1/ 3·1
62,142	11 3	218,038	10 9	769,233	11·1
115,202	1/ 9 0	254,838	1/ 0 7	1,238,165	1/ 5 9
90,117	1/ 4 5	132,974	6 6	528,992	7·6
81,120	1/ 2 8	293,064	1/ 2·7	1,042,244	1/ 3·0
2,664,802	40/ 6 7	8,352,814	34/ 9 7	31,438,275	37/ 9·4
20,633	3·8	1,388,687	5/ 9·4	£2,686,092	3/ 2 7

NATIONAL

ACCOUNTS FOR THE YEAR

COLLIERY PROFIT AND LOSS

SOUTH

SALEABLE TONNAGE

SWANSEA AREA

MAESTEG AREA

3,828,965

2,568,157

1. PITHEAD PROCEEDS

COSTS

2. Wages (including allowances
in kind)

3. Holiday Pay

4. Workmen's Compensation

5. National Insurance

6. Roof Supports

7. General Stores

8. Power, Heat and Light

9. Repairs and Renewals

10. Salaries

11. General Expenses

12. Administrative Expenses

13. Depreciation

14. TOTAL COSTS

**15. LOSS before charging In-
terest and Interim Income**
(Item 1 of Schedule IX)

Amount

£

8,802,752

Per Ton
Saleable

s

d

45/11·8

Amount

£

5,420,096

Per Ton
Saleable

s

d

42/ 2 5

8,266,922

43/ 2·2

4,031,835

31/ 4 8

266,315

1/ 4·7

147,870

1/ 1 8

384,792

2/ 0·1

234,121

1/ 9 9

151,591

9 5

81,181

7 6

913,861

4/ 9 3

562,344

4/ 4 5

606,232

3/ 2 0

319,336

2/ 5·8

963,172

5/ 0 4

596,035

4/ 7 7

259,452

1/ 4·3

115,053

10 8

268,417

1/ 4 8

197,251

1/ 6 4

395,079

2/ 0 8

211,391

1/ 7 8

287,184

1/ 6 0

91,763

8 6

347,108

1/ 9 7

179,904

1/ 4·8

13,110,125

68/ 5 8

6,768,084

52/ 8 5

4,307,373

22/ 6 0

1,347,988

10/ 6·0

Note — Figures in italics denote losses.

COAL BOARD

ENDED 31st DECEMBER, 1947**ACCOUNTS FOR THE YEAR****WESTERN DIVISION**

RHONDDA AREA		ABERDARE AREA		RHYMNEY AREA	
3,683,281		2,743,942		3,496,315	
Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s d
7,953,103	43/ 2·2	5,981,751	43/ 7 2	7,466,453	42/ 8 5
5,430,481	29/ 5 8	3,836,592	27/11·6	4,371,997	25/ 0·1
225,530	1/ 2·7	156,527	1/ 1 7	183,946	1/ 0 6
358,796	1/11·4	339,980	2/ 5·7	339,465	1/11 3
115,395	7 5	81,517	7 1	95,665	6 6
832,453	4/ 6 3	476,237	3/ 5 7	485,412	2/ 9·3
511,346	2/ 9 3	528,220	3/10 2	513,096	2/11·2
881,084	4/ 9 4	469,485	3/ 5 1	650,816	3/ 8·7
29,224	1 9	15,623	1 4	7,189	0·5
239,492	1/ 3·6	189,047	1/ 4 5	208,522	1/ 2·3
299,672	1/ 7 5	268,065	1/11·4	324,466	1/10·3
108,502	7 1	89,421	7 8	117,691	8 1
290,423	1/ 6 9	233,947	1/ 8 5	316,709	1/ 9·7
9,322,398	50/ 7·4	6,684,661	48/ 8 7	7,614,974	43/ 6 7
1,369,295	7/ 5 2	702,910	5/ 1·5	148,521	10 2

(continued overleaf)

NATIONAL
ACCOUNTS FOR THE YEAR
COLLIERY PROFIT AND

SOUTH WESTERN				
MONMOUTH AREA			FOREST OF DEAN AREA	
4,756,014			752,976	
SALEABLE TONNAGE	Amount	Per Ton Saleable	Amount	Per Ton Saleable
	£	s d	£	s d
1. PITHEAD PROCEEDS ..	10,138,459	42/ 7 6	1,572,675	41/ 9·3
COSTS				
2. Wages (including allowances in kind)	7,588,006	31/10 9	1,215,306	32/ 3 4
3. Holiday Pay	286,323	1/ 2 4	45,091	1/ 2 4
4. Workmen's Compensation	382,015	1/ 7 3	43,976	1/ 2·0
5. National Insurance	167,547	8·5	26,293	8 4
6. Roof Supports	1,007,172	4/ 2 8	102,579	2/ 8 7
7. General Stores	602,533	2/ 6 4	94,612	2/ 6 2
8. Power, Heat and Light	1,136,223	4/ 9·3	145,528	3/10 4
9. Repairs and Renewals	67,244	3 4	2,796	0·9
10. Salaries	331,997	1/ 4 8	39,229	1/ 0·5
11. General Expenses	464,299	1/11·4	53,987	1/ 5 2
12. Administrative Expenses ..	151,896	7 7	22,078	7 0
13. Depreciation	310,824	1/ 3·7	42,843	1/ 1·6
14. TOTAL COSTS	12,496,079	52/ 6 6	1,834,318	48/ 8 7
15. LOSS before charging Interest and Interim Income (Item 1 of Schedule IX)	2,357,620	9/11·0	261,643	6/11 4

Note.—Figures in italics denote losses

SCHEDULE X
South Western Division—(contd.)
& South Eastern Division

COAL BOARD

ENDED 31st DECEMBER, 1947**LOSS ACCOUNTS FOR THE YEAR**

DIVISION—(contd.)				SOUTH EASTERN DIVISION	
BRISTOL AND SOMERSET AREA		TOTAL			
589,214		22,418,864		1,375,359	
Amount £	Per Ton Saleable s d	Amount £	Per Ton Saleable s. d.	Amount £	Per Ton Saleable s. d.
1,308,902	44/ 5·1	48,644,191	43/ 4 7	3,153,535	45/10 3
993,110	33/ 8 5	35,734,249	31/10 5	2,192,949	31/10 7
39,092	1/ 3·9	1,350,694	1/ 2 5	72,609	1/ 0 7
49,866	1/ 8 3	2,133,011	1/10 8	160,030	2/ 3 9
22,603	9 2	741,792	7 9	41,853	7 3
66,127	2/ 2 9	4,446,185	3/11 6	275,413	4/ 0 1
82,439	2/ 9·6	3,257,814	2/10 9	95,585	1/ 4 7
125,058	4/ 2 9	4,967,401	4/ 5·2	327,338	4/ 9·1
17,362	7 1	513,943	5 5	143,060	2/ 1 0
51,373	1/ 8·9	1,525,328	1/ 4 3	70,498	1/ 0·3
50,751	1/ 8 7	2,067,710	1/10·1	107,958	1/ 6·8
17,011	6·9	885,546	9 5	60,146	10·5
40,165	1/ 4 4	1,761,923	1/ 6 9	96,622	1/ 4 8
1,554,957	52/ 9·3	59,385,596	52/11·7	3,644,061	52/11·9
246,055	8/ 4 2	£10,741,405	9/ 7 0	£490,526	7/ 1 6

NATIONAL

ACCOUNTS FOR THE YEAR

COKE OVEN PROFIT AND LOSS

		TOTAL		SCOTTISH DIVISION		NORTHERN DIVISION	
COKE PRODUCTION	Tons	5,949,764		179,031		2,463,386	
		Amount £	Per Ton of Coke s. d.	Amount £	Per Ton of Coke s. d.	Amount £	Per ton of Coke s. d.
VALUE OF PRODUCTION							
1. Coke		18,159,317	61/ 0·5	663,857	74/ 1·9	7,759,070	62/11·9
2. By-products (<i>see note 1</i>)		7,090,463	23/10 0	74,461	8/ 3 8	2,584,306	20/11·8
3. TOTAL		25,249,780	84/10·5	738,318	82/ 5·7	10,343,376	83/11·7
COSTS							
4. Raw Materials		17,396,840	58/ 5 8	511,949	57/ 2·3	7,327,526	59/ 5·9
5. Wages (including allowances in kind)	allow-	2,177,374	7/ 3·8	87,618	9/ 9·4	981,490	7/11·7
6. Holiday Pay		74,143	3·0	3,138	4 2	30,547	3 0
7. Workmen's Compensation		28,804	1·2	1,428	1·9	8,194	0 8
8. National Insurance		51,888	2 1	1,810	2·4	21,689	2 1
9. General Stores		550,587	1/10 2	15,230	1/ 8·4	259,064	2/ 1 2
10. Power, Heat and Light		2,228,911	7/ 5 9	12,619	1/ 4 9	717,048	5/ 9·9
11. Repairs and Renewals		243,022	9·8	15,365	1/ 8·6	20,418	2·0
12. Provision for Rebuilding Ovens		297,808	1/ 0 0	6,571	8·8	173,080	1/ 4·8
13. Salaries		232,752	9 4	5,149	6·9	84,725	8 3
14. General Expenses		245,247	9 9	12,208	1/ 4·5	80,483	7 8
15. Administrative Expenses		114,274	4 6	7,757	10·4	43,779	4·3
16. Depreciation		682,575	2/ 3·5	13,716	1/ 6 4	315,479	2/ 6 7
17. TOTAL COSTS		24,324,225	81/ 9 2	694,558	77/ 7·1	10,063,522	81/ 8·5
18. PROFIT OR LOSS before charging Interest and Interim Income (<i>Item 3 of Schedule IX</i>)		£925,555	3/ 1·3	43,760	4/10·6	279,854	2/ 3 2

Notes.—1. The value of By-products (*Item 2*) relates only to Primary By-products. Profits and
2. Figures in italics denote losses.

COAL BOARD

ENDED 31st DECEMBER, 1947

ACCOUNTS FOR THE YEAR

NORTH EASTERN DIVISION		NORTH WESTERN DIVISION		EAST MIDLANDS DIVISION		SOUTH WESTERN DIVISION	
2,126,131		174,182		632,211		374,823	
Amount £	Per Ton of Coke s d.	Amount £	Per Ton of Coke s d.	Amount £	Per Ton of Coke s d.	Amount £	Per Ton of Coke s d.
6,101,634	57/ 4·8	589,745	67/ 8·6	1,777,601	56/ 2·8	1,267,410	67/ 7·5
3,115,197	29/ 3 6	201,366	23/ 1·4	847,716	26/ 9 8	267,417	14/ 3·2
9,216,831	86/ 8·4	791,111	90/10·0	2,625,317	83/ 0·6	1,534,827	81/10·7
6,233,923	58/ 7·7	550,390	63/ 2·4	1,749,956	55/ 4 3	1,023,096	54/ 7·1
709,520	6/ 8 1	47,784	5/ 5 8	200,058	6/ 4·0	150,904	8/ 0·6
24,394	2·8	3,188	4·4	7,164	2 7	5,712	3·6
10,941	1 2	1,200	1 6	4,733	1 8	2,308	1·5
17,144	1 9	1,879	2·6	5,314	2·0	4,052	2·6
166,159	1/ 6·8	16,844	1/11·2	59,021	1/10 4	34,269	1/ 9·9
1,123,006	10/ 6·8	63,874	7/ 4·0	214,106	6/ 9·3	98,258	5/ 2·9
108,926	1/ 0·3	39,915	4/ 7·0	25,491	9·7	32,907	1/ 9·1
54,459	6 2	23,151	2/ 7 9	32,433	1/ 0·3	8,114	5·2
90,838	10·2	19,567	2/ 3 0	20,172	7 7	12,301	7·9
76,688	8·7	12,918	1/ 5 8	40,145	1/ 3 2	22,805	1/ 2·6
39,321	4 4	2,964	4 1	18,656	7·1	1,797	1·1
213,277	2/ 0·0	22,348	2/ 6·8	99,845	3/ 1 9	17,910	11·5
8,868,596	83/ 5 1	806,022	92/ 6·6	2,477,094	78/ 4 4	1,414,433	75/ 5·6
348,235	3/ 3 3	14,911	1/ 8·6	148,223	4/ 8 2	120,394	6/ 5·1

Losses on the production of Secondary By-Products are shown as Item 4 of Schedule IX